CINETic

International Center for Research and Education in Innovative and Creative Technologies

National University of Theatre and Film "I.L. Caragiale"



CINETic

International Center for Research and Education in Innovative and Creative Technologies

National University of Theatre and Film "I.L. Caragiale"

National University of Theater and Film "I.L. Caragiale" (UNATC)

The National University of Theater and Film "I.L. Caragiale" (UNATC) is a higher education institution for theatre and film based on a tradition of more than 180 years of theatre teaching in Romania.

The first Theater Faculty started its activity in Bucharest, in 1834, within the Philharmonic School. In 1948 the Faculty of Stage Directing was established within the Art Institute, which, for a period of two years (1948-1950), reunited the entire artistic education in Bucharest. In 1950, the Film Institute and the Theatre Institute are established as separate schools. In 1954, the two institutes merge under the name of "I.L. Caragiale" Institute of Theater and Film Art (IATC), continuing the theatre teaching tradition in Romania and establishing the current institution. In 1990, IATC becomes the Academy of Theater and Film (ATF)-the only higher education institution in Romania, in the field of film and theater, with the ranking of national university. Since then, ATF underwent a continuous transformation process, which led to the establishment of new departments and specializations, such as Choreography, Set Design and Multimedia, alongside the more traditional ones, such as Acting, Directing or Cinematography. In the meantime, the enrollment numbers have grown and the curricula and programs have also been improved and diversified, leading to the transformation of the Academy into the "I.L. Caragiale" University of Film and Theater, in 1998.

Ever since 2001 the institution has been known as the National University of Film and Theater "I.L. Caragiale" in Bucharest (UNATC).

UNATC assumes its role as national cultural center, contributing to the formation, development and dissemination of cultural values, especially in the fields of theatre and film. UNATC represents a benchmark for the arts and culture in Romania, as well as a generator of artistic and cultural events.



Mission

- Training specialists in the fields of theatre, film and convergent arts areas (TV, media, multimedia, interactive technologies, game design, light design, artistic pedagogy and cultural management), at BA, MA and PhD level.
- Promoting a spirit of innovation and excellence, critical thinking and creativity, through individual and collective artistic creation, through research, as well as through dissemination of results at the national and international level.
- Protecting cultural identity, promoting and supporting diversity in forms of expression, as well as in creative content.
- Encouraging an academic democratic framework, based on respect for fundamental rights and freedoms.
- Active citizen participation in society and the promotion of social inclusion and entrepreneurship for good relations with the free market.

UNATC has also focused on developing research, as well as continuous formal and non-formal education. As a result, in the interval 2009–2015, UNATC has accessed well over € 10 million through grant competitions such as POC, POSCE, POSDRU, CREATIVE EUROPE, FDI. In 2014, UNATC started the process of establishing the International Center for Research and Education in Innovative Creative Technologies—CINETic, as a research department of the university.

Through CINETic, the National University of Theater and Film "I.L. Caragiale" Takes a Leap of Faith in the Spirit of Contemporaneity

CINETic—research and education in the fields of film and performing arts, creativity in digital media in support of the artistic message, developing new and creative learning strategies and research in two fields of knowledge into human nature, as old as they are new: theater and film.

Through CINETic, UNATC "I.L. Caragiale" takes a leap of faith in the spirit of contemporaneity, towards artistic research and a more profound and detailed exploration of its own domains, as well as towards research through art in the field of human existence itself.

Digitization is not only a technological revolution. Human relationships and interactions with the world at large are also significantly influenced. Cognitive psychology, neuroscience and the science of communication—all bring forth moving testimonials about the manner in which we see the world and the manner in which we see ourselves in this era. Artists can be excellent "test pilots" in this journey, as well as guides across this *terra incognita*. The development of artistic knowledge legitimizes the arts at a higher level, of great relevance to research, science and innovation.

The high level of trust in the capacity of artistic research to contribute to the broadening of the field of knowledge is what motivates us in this endeavor. At the same time, we secretly hope to discover new ways of expressing ourselves in the contemporary world.

Prof. Nicolae MANDEA, PhD

Rector of the National University of Theatre and Film "I.L. Caragiale" Bucharest



Nicolae MANDEA is a graduate of the "I.L. Caragiale" Institute of Theater and Film Art (IATC), having majored in Directing for theater, film and television. He is also a graduate of the "Traian Vuia" Polytechnic Institute, with a specialization in Automation and Computers. He was the Director of the Experimental Studio for Synthesis Languages (currently the "Ion Sava" Studio) focusing on collaborative projects for students from different departments-Directing, Acting, Choreography, Puppets, Playwriting. He has worked on the development of several projects, among which: Persona-improving performance in interpersonal communication through visual and theatre methods (1997), Exploring the pedagogical coordinates of the spectacular model of multimedia communication (1998), Mobile semi-portable unit for editing and multichannel sound system for theater and choreography sound design workshop (2003), The apprentices of today, the professionals of tomorrow in the field of television, Skills in communication-performance in education and Integrated system of master's programs in the field of sound engineering, image and multimedia applications (2010-2013). He is certified in the field of project management, human resources management, with both entrepreneurial social and civic skills.

Mission & Background

CINETic is a research department of UNATC IL Caragiale.

CINETic develops technological research and innovation in the fields of digital interaction and applied neuroscience to performing arts.

The International Center for Research and Education in Innovative Creative Technologies was founded as a department of UNATC "I.L. Caragiale" in 2014. The establishment of CINETic was financed through a POSCCE grant of \in 8 million, having as objective the opening of new research centers and developing already existing ones. The grant allowed UNATC to acquire a building for CINETic and provide its six laboratories with state-of-the-art equipment for digital interaction, worth more than \in 3.5 million.

CINETic's mission is to develop knowledge and innovate at international level in the fields of performing arts and film, as well as in the fields that lead to their growth and transformation. The knowledge acquired in theatre and film is expanded through research and innovation, within interdisciplinary projects that bring together art, science and technology.

CINETic Laboratories

- Creative Digital Techniques for Film (LIC)
- Digital Light-Sound Interaction (LIS)
- Digital Animation (LAD)
- Virtual Set Design and Augmented Reality (LAR)
- Digital Interaction (LID)
- Cognitive Development and Applied Psychology through Immersive Experiences (LDCAPEI)

Some of the most significant tech systems at CINETic include:

- CAVE-CIN—an automatic virtual environment with immersive stereoscopy projection system on four screens and multiple interaction tools;
- motion capture system with infrared cameras and facial motion capture system;
- · motion analysis system with high speed video cameras;
- motion control systems for the control of camera movements in robotic regime;
- full 3D production flow for cinematography, animation and sets, with Alexa SXT, Red Dragon, with spherical and anamorphic optics;
- production tools including 3D printing and CNC router;
- various physiological data collection systems (eye-tracking, GSR, ECG, EMG etc.) and high-density electroencephalography (EEG) with 256 channels.

Scientific context and relevance

Performing arts represent a fundamental area of human expression, but also a field of knowledge through practice. The unprecedented increase of digitization and data transmission is changing and continually diversifying human experience, adjusting the ways humans express themselves. Digital devices augment our reality and bring new challenges at technological and socio-human levels. The insertion of new technologies in everyday life is taking place at an extremely fast pace.

The scientific study of immersive environments like theater and film, and more novel ones, such as virtual reality or video gaming—brings a holistic perspective on human interaction.

The representation of human actions in fictional environments contributes to the shaping of human behavior, but the complexity of the artistic phenomenon seems to escape science, which until now, never thoroughly evaluated the mechanisms involved in artistic representations or the effects art has on people.

At CINETic, with the aid of technological tools, we create innovative digital immersive environments and enhance performance with digital layers. Moreover, through psycho-neuro-cognitive assessment we investigate mechanisms underlying creative processes, as well as reception of performing arts.

The performing arts have been used as "emotional regulators" both at individual and societal level, ever since the dawn of time. The further scientific evaluation of the role that art has, as an emotional and cognitive enhancer, will increase the possibility of more effective use of art for a harmonious social development. The means by which this could be achieved entail the development of new methods of intervention through art as well as novel teaching methods.

The beneficial effects of theatre therapies have been well documented and used in therapeutic practice, psychodrama being one of the most influential experience-driven psychotherapies. Embodied cognition and play are at the foundation of performing arts and of human learning. The development of knowledge about human interaction in theatrical environments is necessary for developing an emotionally harmonious contemporary self. By understanding the deep aspects of direct interaction, we can develop more human-oriented digital interactions.

Implementation stage

CINETic is a research infrastructure created through the *Sectorial Operational Program—Increasing the Economic Competitiveness* and an investment of € 8 million, in the form of a grant, implemented in the interval 2014–2016. Currently, the project is in the sustainability phase, at the end of which 10 new research jobs will be created. At the present moment, CINETic has 7 employed researchers, as well as technical and administrative staff.

Presently, CINETic is developing the project entitled *MET—Developing a theatre therapy method with impact at the neurochemical and neurocognitive level*, where over 14 researchers are employed. The project is to be implemented over a period of 4 years and it is valued at \in 2 million.

At the same time, CINETic develops its human and technological resources in the field of VR, as well as opportunities for national and international cooperation, aiming to become a pillar of regional expertise in this field.

As a recognition of its importance, CINETic was ranked as a center of national importance in the field of Social and Cultural Heritage by the Romanian Committee for Research Infrastructures (CRIC) alongside 3 other entities in the 2017 report.

Socio-economic impact

VR (virtual reality) and gaming are two of the most dynamic sectors in technological and artistic innovation with major potential for economic growth. The increase in production capabilities and the study of the effects of these media on human development are essential for their integration in a harmonious and valuable way in society.

CINETic is at the forefront of development and research in the field of digital interaction, seeking not only to advance knowledge, but also to make a beneficial impact for both individuals and communities.

As part of UNATC, CINETic is dedicated to growing the impact of theatre and film in society through research in applied and artistic forms.

CINETic a Space for Experiments and Interdisciplinary Innovation

The International Center for Research and Education in Innovative Creative Technologies is a long-term ambitious project of UNATC "I.L. Caragiale", geared towards increasing the role of art in society, through the development of research and innovation. CINETic intends to be an international center of excellence in the field of digital interaction, with high impact in the development of art innovation in Romania.

Artists are natural born researchers. There would be no art without research. Whether it was research for new pigments, better mastery of the body or stronger ways of rendering emotions through stories, artists have always been in search of new tools and knowledge. While science shows its results in theory and in technical innovation, the results of research in art can be found in artistic products: films, plays, digital content and sometimes in theories. The awaited feeling of magic which surrounds the work of art can be so hard to overcome for spectators that sometimes the powers of artists, acquired through practice and research, were attributed to the devil.

I hope that CINETic is charting an area of experiment and interdisciplinary innovation that I have always desired during my student years, as well as in my work as director.

Alexandru BERCEANU, PhD



Alexandru BERCEANU is currently the Director of CINETic where he also works as a researcher in the MET project. His interest in neuroscience started during his PhD studies when he worked on BCI interfaces in real time for detecting arousal changes in spectators, along other psychological aspects involved in the viewing of violent actions in theatre. Based on this interest, in 2013 he initiated the CINETic grant proposal for interdisciplinary research at UNATC "I.L.Caragiale" where he was teaching directing.

Alexandru Berceanu is also a director and cultural manager. He directed numerous theatre performances in both state and independent theatres which won national and international awards. He is a founding member of the dramAcum NGO. Starting from his interest in new playwriting and extending performance areas, Alexandru Berceanu has collaborated in interdisciplinary projects like *Immersive and Subversive Installation 1958–1958*, he wrote *Mickey on the Danube*, a graphic novel and directed VR experiences such as *Bucharest 41* and *Touch*.

Alexandru Berceanu's artistic practice combines documentary work with artistic intervention. His work is centered on discrimination, violence and the consequences of politics at individual level. During his performance entitled *interface 3*, music was generated in real time from EEG, through computing algorithms and emotion recognition approaches. He co-wrote and directed the play *Skin Look* based on his documentation of the Roma identity in Turkey and Romania.

°CINETIC Laboratories



Laboratory for Creative Digital Techniques for Film (LIC)

The mission of the Laboratory for Creative Digital Techniques for Film is to provide the most advanced tools for digital processing at film industry level for students, teaching and research staff, and to develop expertise in the use of digital tools for film. Creating a critical mass of CGI and VFX experts is a necessary target for the development of the filed at national level.

In the last 30 years, film has gone through a major transformation going from analogue to digital production and distribution. The digital environment has increased the work speed, as well as the profits, due to its level of attractiveness and the quality of the end products—films, media content, games etc. At the same time, it also made possible new working methods and generated more and more creative ways of expression. Film specialists and media content creators are fully dependent on digital technical support. Digital tools bring new powers to film creators through CGI and VFX, alongside traditional editing techniques.

Most productions of the MA film students at UNATC are graded in this lab, where students also receive training in grading. The lab also hosts a series of CGI workshops and classes for both students and teachers.

The lab provides space and tools for student projects of the following MA programs at UNATC:

- Film Directing
- Cinematography
- Film Editing
- · Film and Sound Editing
- New Media Design



Facilities & Equipment

- Grading Studio
- Main Editing Room
- 6 editing spaces

The Laboratory for Creative Digital Techniques for Film has two technological lines—grading and video editing, coloring units, extension boxes, LTO, monitors dedicated to coloring, Da Vinci grading consoles, 4K Barco DP4KP video-projector, DCP player and maker, spectrometer. The Laboratory has 7 graphics stations dedicated to video editing, with specific software, also covering stereoscopic postproduction.

Editing and grading units are connected through a physical network, with joint access to a storage unit of $140\,\mathrm{TB}$, essential for big data transfers specific to 4K resolution. The data network can have a transfer speed of up to $10\,\mathrm{GB}$ for 6 graphic units.

Laboratory for Digital Sound-Light Interaction(LIS)

Digitally generating and controlling sound and light represent fields of research and development that are growing continuously. The definition of the process may seem simple—the digital synthesis or capture of sound and its control/ transformation in real time. Yet, the diversity of possible implementations renders an extraordinary technological richness (programming, DSP, hardware interfaces, robotics etc.), as well as artistic diversity (musical applications, performance art, inter-media etc.) which are continuously growing. Controlling light is

also an expanding filed where tools like coding, sensors, tracking and

generating dynamic light are basic tools.

By providing expertise and granting access to the laboratory's facilities to students with practical and research projects, CINETic has contributed to the advancement of a new MA Program at UNATC: Interactive Technology for Performing and Media Arts (ITPMA).

The lab's mission is to develop research projects in the field of sound and light interaction, and to design new tools for interaction and innovative interactive projects.

Research Directions

- · automated and AI-based interactions with light and sound
- · spatial sound
- · computer-assisted sound composition and sound design
- the development of new technological processes, either software or hardware, to support experimental and artistic activities

Projects

In the performance *interface 3*, EEG signals generated real time sound and controlled lights. This experimental performance was accomplished through an interdisciplinary collaboration between the researchers and postgraduate students from UNATC, Polytechnics and the Music University in Bucharest, which materialized in specific software solutions.

The lab's most recent project is *Soundthimble*, headed by researcher Grigore BURLOIU, Phd, from which resulted more than 3 published papers.



Facilities & Equipment

- Mixing Studio for cinema sound
- Sound and light measuring line

The sound acquisition and live shows system is built around a digital Yamaha QL1 console, expanded with Yamaha MY16AES. With the support of the studio microphones (Neumann TLM 107), field microphones (Schoeps CMIT 5 U) and lanyard microphones (VT 700 & VT 506), as well as the RME Fireface UFX interface, shows and recordings can be done inside the laboratory, situation for which a portable audio system is also available, based on a Sound Devices 664 unit.

Measuring Equipment includes Digital Multimeter—Keysight 34461A Digital Multimeter, 6 1/2 Digit, Image Engineering Ilumination Device LE7 (2 iQ-LEDSs); Image Engineering Starter Brodcast—ETC-SK2; Chrosziel—TESTCHART MTF HDTV SUPER P-TCMSW23; Osciloscope with 4 channles—Keysight DSOX3014T Oscilloscope: 100 MHz, Keysight U8903A Audio Analyzer AES3-SPDIF and DSI.

Software

For production and post-production, the lab has plug-in packages (McDSP, Altiverb), a monitoring system (Dynaudio BM6 mkIII), and a control system (Yamaha Nuage).

Laboratory for Digital Animation

(LAD)

The mission of the Laboratory for Digital Animation is generating and using innovative techniques in the field of animation by combining traditional analogue animation with computerized techniques. The Animation lab is a place for cross domain animation.

The lab primarily provides production space, tools and expertise for the animation programs at UNTAC, with a stated goal to participate in the re-emergence of the Romanian animation industry.

As part of its academic strategy, UNATC "I.L.Caragiale" has developed both a Master's and a Bachelor's program in Animation, being the only university in Romania accredited in this field.

Research Directions

- · motion capture animation
- use of robotic tools in animation through computerised control
- animating virtual objects and generating computerized animation
- · animated computer graphics in various environments

Projects

Every year, the Laboratory for Digital Animation hosts an intensive animation workshop entitled Animation Worksheep.

Bucure ti ReAnimat/ ReAnimating Bucharest—a project aimed at drawing attention to mural artworks in Bucharest. Some of these mural works were animated with the aid of worksheepers (young artists taking part in Animation Worksheep) and UNATC students from the Animation program. A mapping session was created for each of the major works in the city, in partnership with Les Ateliers Nomad. The overarching goal of this project is to lay the foundations of a genuine urban mythology of Bucharest, which has, just as many visual, conceptual and socio-cultural resources as any other major cities in the world. And perhaps a drop of extra energy.

Facilities & Equipment

- Animation studio (production space for motion capture and stop motion)
- Computer graphics studio
- Animoko, motion control for stop frame animation, 3D scanner, 8 MacPro with graphic tablets, 5 Canon DSLR with optics, including cinema lenses, VICON MOCAP



Laboratory for Virtual Sets Design and Augmented Reality

(LAR)

The mission of the Laboratory for Virtual Sets Design and Augmented Reality is to innovate in set design by augmenting spaces through digital enhancements and creating live interactions between performers and computer generated spaces and objects. The lab offers space, tools and expertise for research and innovation in set design, as well as for the MA programs in set design at UNATC. The mission of the lab is to generate new techniques and to make them accessible to specialists in the field and to students, as well as to the larger public, consumer and user accessibility being one of the key missions of by the lab.

Research Directions

- the development of immersive 3D and 2D environments, with direct visualization or based on optic systems (e.g. polarization glasses or mobiles)
- · developing virtual sets on unconventional surfaces
- human-computer interaction, generating movement of real and virtual objects through interaction with performers
- developing techniques for computerized graphic art in various mediums:
- · augmented reality technologies

Projects

- Schrodinger's Cat, directed by Alexandru Berceanu
- · Counterpart, directed by Cinty Ionescu
- Spatial Memories of Future Past, concept by Ciprian F c eru
- · Clouds, concept by Marius Hodea

Facilities & Equipment

- Workshop space for set building (90 sqm)
- Computer graphics studio (100 sqm)
- 10 Apple Mac Pro computers to generate virtual sets
- 3D scanner
- 3D printer
- CNC ROUTER 2×2.8 sam



Laboratory for Digital Interaction

(LID)

The Laboratory for Digital Interaction reunites some of the top lines of current motion capture techniques. It is the first laboratory in Romania dedicated to studying interaction between physical and virtual bodies and thus between the human body and the computer.

The mission of the Laboratory for Digital Interaction is to integrate under this concept the activity of all CINETic laboratories, by developing complex innovative creative projects in research and development.

Combining digital art and live performance, such as acting and dance, is currently considered cutting edge in entertainment, but it will become the common form of art in the future. The fundamental concept of the Laboratory for Digital Interaction is the digital immersive experience.

UNATC has developed an MA in New Media Design which is focused on training professionals and researchers in this field.

Research Directions

- · generating and interacting with virtual immersive environments
- motion capture;
- interaction between physical and virtual bodies;
- interaction between human beings and computers through computer interfaces;
- · augmented reality systems;
- · video games and gamified experience.

Projects

- · My Life Rehearsed in One Leg, directed by Bogdan Musta
- Me Shakespeare, coordinated by Liviu Lucaci
- Touch-VR, documentary project, directed by Alexandru Berceanu

Facilities & Equipment

- CAVE-CIN interactive immersive stereoscopic projection system on four screens
- Multifunctional hall (140 sqm), with a holding capacity of 90 seats
- Modula Mr. Mocco—motion control system capable of 6 axis movement as well as learning movements and replicating them
- 1 Red Dragon 5K with Leica Summicron ontics
- 2 ALEXA SXT cameras
- Mid-size Stereotec RIG
- Anamorphic lenses (a set of ARRI anamorphic fixed lenses and a set of anamorphic lenses with Angeniuex zoom lens)
- VICON motion capture system with 8 cameras and a facial motion capture system



Laboratory for Cognitive Development and Applied Psychology through Immersive Experiences (LDCAPEI)

The mission of the Laboratory for Cognitive Development and Applied Psychology through Immersive Experiences is to evaluate the impact of immersive environments on human beings at a cognitive and emotional level and to understand their basis at a neurophysiological level.

Representing human actions in theatrical manner is an innate ability of humans, based on complex communication tools. Reenacting, transforming and reshaping realities by repetition or rehearsal are made possible through complex cognitive and emotional processes. Theatre offers a unique opportunity to study rehearsed and spontaneous social interaction providing unique experimental set-ups. Storytelling is at the basis of transmission of emotions and studying film and theatre with a neuroscience approach opens a new path in understanding complex human behavior. The objectives of LDCAPEI are to contribute to an emotionally harmonious society by the use of art and to improve theatre and film practice through interdisciplinary research on the mechanisms involved in their development. LDCAPEI aims to develop an evidence-based approach in art therapies and art teaching.

Research Directions

- interdisciplinary research between theatre, film, psychology and neuroscience
- EEG and ERP evaluation of effects of theatre and films
- developing tools and methods to asses psycho-physiological effect of immersive experiences
- emotional and cognitive enhancement through immersive experience
- experimental investigations in the field of experiential psychotherapies through objective measures
- development of psychotherapeutic tools through virtual environments
- · development of brain-computer-interfaces

Projects

 Developing a Methodology of Therapy Through Theatre with an Effect at the Neurochemical and Neurocognitive Levels (MET)



- Room for collecting bio samples
- Electrodes, also equipped for ERP Heart rate, GSR and other electrodermal signal
- Eye tracking system with stereoscopic module
- -80°C freezer and basic processing bio sample lab
 High speed video motion tracking system with six cameras
 Analysis software: MATLAB, LabVIEW, SPSS
 Oculus Rift



UNATC MA Programs @ CINETic

Film Faculty

Art of Game Design (in English)

Interactive Technology for Performing And Media Arts (in English)

New Media Design (in English)

Animation Film (in Romanian)

Theatre Faculty

Performing Art-Therapy (in Romanian)

Art of Game Design (MA) (in English)

Mission

The Art of Game Design Master's Program aims to use the expertise UNATC has in fiction, storytelling and development of interactive experiences through play and game. Courses provide theoretical knowledge for the creation of video games, as well as technical and artistic skills for video game development. During the two years of study, students develop prototypes for analog and digital games. At the end of the program, the graduates will have the necessary knowledge to develop a functional game prototype, including the necessary programming elements, and will become specialized in an artistic segment of game design.

The teaching language is English, a specific element of the international game development framework. The opening of this postgraduate program in 2018 is in alignment with UNATC's vision for the future development of the audio-visual field and the need to provide higher education training in these areas with large socio-economic impact. The existence of the Art of Game Design MA sets the foundation for research in this area within UNATC, as well for the development of hybrid interactive environments, combining film, VR, AR with the physical presence of the actor through gamified experiences.

- Game Design
- Game Art
- · Game Development
- Game Production
- Art Research and Development Methodology
- · Game as Social and Educational Medium
- · Game Asset Creation
- · Analog and Digital Game Prototyping
- Digital Media Studies
- Gaming as a Total Form of Art
- VR/AR/MR Playable Experiences
- · Practice and Internship



Interactive Technology for Performing and Media Arts (MA)

(in English)

Mission

The Interactive Technology for Performing and Media Arts Master's Program trains students to acquire advanced knowledge in digitally controlling sound, light, image and coding for the arts. Graduates of the program can continue as designers for sound, space, interaction, and nonlinear narratives. The curriculum is structured to enable students to develop technical skills as well as concepts. Throughout the program, students explore a variety of interactive environments. Projects are based on the design and creation of sound and visual interfaces, development of interactive virtual environments, installations, augmented performances and use of digital design concept at the highest standards. All teaching and applied activities are done in English, providing graduates the opportunity of easily integrate into creative and research projects at international level.

- Digital Media Arts
- · Digital Storytelling
- · Creative Coding and Software Design
- · Digital Arts Practice
- Game Design
- · Spatial Design
- · Sound Design for Interactive Media
- · Interactive Music Systems
- Interactive Art and the Body
- · Media Arts Project Research & Development



New Media Design (MA) (in English)

Mission

The New Media Design Master's Program is focused on the study of digital environments, with possible applications in film and new formats, such as 360° experiences on various platforms, or mixed reality. Structured as an interdisciplinary program, this Master's offers theoretical courses and applied activities in film, cinematography, sound and editing, as well as the use of VR-specific elements and 3D modeling. Understanding the specifics of digital environments is dubbed by practical projects that aim at developing creativity, research and innovation in the field. Graduates will be professionals in new media techniques, trained to actively participate in major projects in both new media and the film industry.

- · New Media Fundamentals
- · New Media Technologies
- New Media Filmmaking
- · New Media Cinematography
- Video Editing and Sound Design for Virtual and Interactive Environments
- New Media Filmmaking Practice
- · Production for New Media Film
- Production for Virtual Environments
- Production for Visual Effects
- Production for Virtual Environments
- Visual Anthropology



Animation Film (MA) (in Romanian)

Mission

The Animation Film Master's Program aims to train specialists in this field, in response to a real need for animation experts on the market. Students are taught various creative methods, allowing for both classical and modern animation techniques, such as 2D and 3D animation. The theoretical and practical information gained within this program is intended to stimulate creativity and generate increasingly innovative projects leading to the exponential growth of the animation film industry in Romania.

- Animation
- Graphics and 3D Animation
- Digital Animation
- Multimedia Techniques for Animation Film
- · Film Directing for Animation
- · Cinematography for Animation
- Editing and Sound for Animation
- · History of Animation Film
- · Contemporary Visual Culture
- · Contemporary Trends in Animation Film
- Scenography
- · Ethics and Academic Integrity
- · Practice and Internship



Performing Art-Therapy (MA) (in Romanian)

Mission

The Performing Art Therapy Master's Program aims to train specialists in the field of art therapies. The program provides the theoretical and practical knowledge necessary for therapeutic intervention based on different art forms, such as psychodrama, drama therapy or art therapy. The program forms skills and abilities specific to clinical therapeutic practice. A broad theoretical background is provided in the key principles of psychodynamic and humanistic psychotherapy, in accordance with current theories and research in art therapy. The Master's is interdisciplinary, bringing together the fields of theater, on the one hand, and psychology, on the other. Courses in Psychology are done by professors and specialists from the Faculty of Psychology, University of Bucharest, as a partner in this Master's program. Practical courses benefit from the teaching and creative experience of artistic practitioners, vocational higher education as well as art therapy experts.

Courses

- · Research in Psychological Assistance and Counseling
- · Elements of Psychological Counseling
- Human Development and Psychological Health
- · Theater, Drama Therapy, Psychodrama, Sociodrama
- · Theater and Psychodrama
- · Workshop in Self-Knowledge through Theater and Performing Arts
- Theater Workshop—Animation Techniques (Puppets, Dolls, Masks)
- Theater Workshop—Visual Arts (Drawing, Color, Modeling)
- Theater Workshop-Eurhythmics
- · Trends in Art Therapy
- · Theater of Daily Life and Dramaturgy of Everyday Life
- · Psychological Counseling in Organizational Context
- · Personal Identity through Vocal and Behavioral Expression
- · Educational Skills Training
- Organizational Counseling and Consultancy
- · Ethics and Academic Integrity
- · Practice of Psychological Assistance
- · Practice of Psychological Counseling
- · Supervised Practice of Psychological Counseling



CINETic Projects

CINETic develops a wide range of projects which have at their core: art, research, technology, interdisciplinarity, advancement of knowledge, social responsibility and a lot of innovation. Since its inauguration in 2016, CINETic has implemented a wide array of projects at national and international level, involving artists, student, scientists, NGOs, public and local authorities, cultural institutions, our work being presented in both cultural and scientific contexts.

2019

Developing a Methodology of Therapy Through Theatre With an Effect at The Neurochemical And Neurocognitive Levels (MET)
France-Romania Cultural Season
Global Game Jam
Light Festival in Lyon
Motion Design—From Sound Interaction To Animation
Creative Romania @ Miraje Festival Lyon
Self Patterns AR App
VR Section @ Technomagique Festival

2018

Spatial Memories of Future Past
Touch—5 VR Experiences
My Life Rehearsed in One Leg
Government of Children
Around the City—Augmented Reality Workshop & App
Games & Politics Game Jam
Art and Technology in Contemporary Culture—Conference
UNATC International
World Theatre Day @ Odeon
Utophobia
Bucure ti Reanimat/Reanimating Bucharest
CINETic Conferences
Animation Worksheep

Haroun and the Sea of Stories by Salman Rushdie
Ldavi CINETic Practice
Video Mapping in Scenography Workshop
Cave Hackaton
Ldavi Worldbuilding Lab VR
LdaVI EEG Lab
Meeting of the Danube Theater Schools in Sulina
Networked Musical Performance with Jacktrip—Workshop by
Constantin Basica
Concert for Violin and Electronic Media—Karen Bentley Pollick &
Constantin Basica
Laboratorul de imaginar/The Imagination Laboratory

2016

Bucharest 41 Virtual Tour VR Pavilion @ Cannes Film Festival Me. Shakespeare Soundthimble Bird in Space Interface

MET

THE DEVELOPMENT OF A DRAMA THERAPY METHOD WITH IMPACT AT THE NEUROCHEMICAL AND NEUROCOGNITIVE LEVEL (MET) aims to develop a methodology for therapy through theatre tools, with an effect at the neurochemical and neurocognitive levels. In collaboration with our partners, we use behavioral, electrophysiological, biochemical and imaging techniques, to determine how minimalist theatre practices impact stress level and social closeness.

The scientific hypothesis of the project is that theatre practices modulate neuronal activity and plasticity by controlling the secretion of the neuro-hormones oxytocin and cortisol, and by adjusting the activity of the immune system. We believe that via these physiological changes, theatre therapies could induce pro-social behaviors, reduce stress, and increase the overall well-being of individuals.

MET benefits from a multidisciplinary team of neuroscientists, theatre artists, psychologists, biochemists and physicists:

- Ioana Carcea MD/PhD, Principal Investigator, UNATC—CINETic, Rutgers BHI, NJMS
- Robert C. Froemke PhD, Scientific Director, UNATC—CINETic, NYU-SOM (New York Univ School of Medicine)
- Alexandru I. Berceanu PhD, Scientific Coordinator, UNATC—CINETic
- Razvan I. Vasilescu, Project Manager, UNATC-CINETic
- Emil Banea, Project implementation expert, UNATC—CINETic
- Emilia Alexandru, Financial expert, UNATC—CINETic
- Horia Murgu PhD, UNATC—CINETic
- Adrian I. Titieni PhD. UNATC—CINETic
- Catalin Nedelcea PhD, UNATC—CINETic, University of Bucharest, Psychology
- Dragos Cirneci PhD, UNATC—CINETic, Spiru Haret University in Bucharest
- Mihaela Onu PhD-Clinical Hospital "Prof. dr. T. Burghele"





Postdocs

- Claudiu Papasteri PhD, UNATC—CINETic, University of Bucharest, Psychology
- Miralena I. Tomescu PhD, UNATC-CINETic
- Ioana Podina PhD, UNATC—CINETic, University of Bucharest, Psychology

PhD Students

- Constantin Augustin-Dan Pistol, UNATC—CINETic, University of Bucharest, Physics / SUUB
- Alexandra Sofonea, UNATC-CINETic
- Romina Sehlanec (Bolda u), UNATC—CINETic
- Catalina Poalelungi, UNATC—CINETic, University of Bucharest, Biology

Technical and Administrative Staff

• Nicoleta Puscasu, Dumitru Tanase, Doina Strat, Mirela Rusu

The Project—Developing a methodology of therapy through theatre with an effect at the neurochemical and neurocognitive levels (MET), co-financed by the European Regional Development Fund (ERDF) through Competitiveness Operational Programme 2014—2020, SMIS code 106688 is implemented by UNATC "I.L. Caragiale". CINETic Centre, LDCAPEI LAB







France-Romania Cultural Season

CINETic participates in the *France-Romania Cultural Season 2019* with six projects in partnership with cultural operators from several important cities in France—Lyon, Nantes and Marseille.

Light Festival in Lyon— French-German-Romanian Student Project

Developed in partnership with Platforme de la Jeune Creation Franco-Allemande Lyon, the project was showcased in the interval 6–9 December 2018, as part of the renowned *Fête des lumières Lyon* and it brought together four different interactive light installations created in collaboration by French, German and Romanian students (from the ITPMA Master's program at UNATC—Octavian Albu, Bogdan Ceangu, Dorin Cucivov, Maria Nastase and Alina Rizescu, under the coordination of researcher Grigore Burloiu):

- Light-Pong (a modern reinterpretation of the first arcade video game where two players play ping-pong)
- 2. *Presence* (an interactive installation where shadows react to the presence of visitors on one side of the screen and, on the other side, a digital pixel effect merges real shadows with projected ones)
- Jupiter in Dialogue (an interactive installation centered around a real statue of Jupiter, "magically" coming to life through interactive light and sound effects)
- Ice-Breaker (a garden installation focused on the relationships between people, the movement and the power of communication that dynamically influences the light network)



Developed in partnership with Stéréolux from Nantes, *Motion Design—From Sound Interaction to Animation* entails a series of workshops and exchanges between professionals in animation and sonification of movement, resulting in a performance that will be presented in Bucharest in June 2019.

Creative Romania

Developed in partnership with the Mirage Festival held in Lyon, in the interval 3–7 April 2019, *Creative Romania* will showcase projects conducted at CINETic, in the field of virtual reality and digital interactive art.

Self Patterns AR App

Developed in partnership with NN Corsino and SCENE44 from Marseille, *Self Paterns* is an augmented reality app for mobile devices that showcases a series of choreographies in urban spaces from both France and Romania.

Concept and choreography: Nicole Corsino, Norbert Corsino

Dance: Ioana Marchidan, Arcadie Rusu 2D and 3D scenography: Patrick Zanoli

AR/VR decelopment: Ciprian Facaeru, Dan Facaeru (CINETic and Augmented

Space Agency)

Avatars: Anaël Seghezzi Music: Jacques Diennet

The *Self Patterns* AR app is scheduled to be officially launched on April 20th 2019 when the Romanian part of the Cultural Season commences in Bucharest.

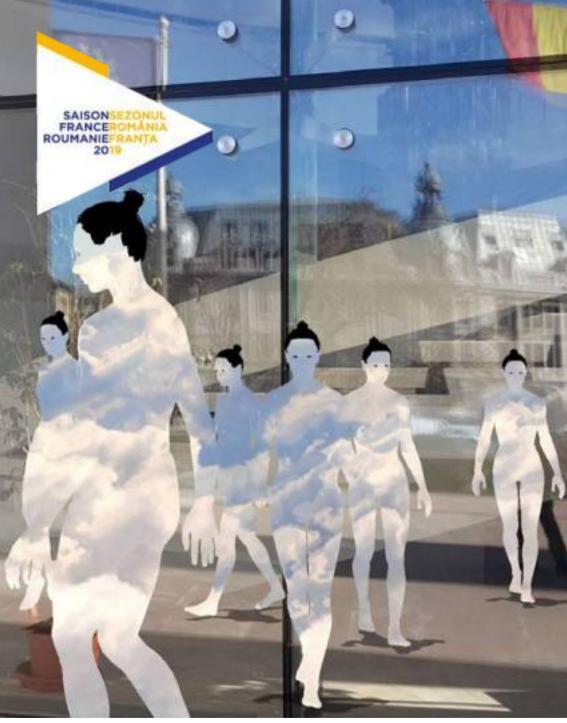
VR Section @ Technomagique Festival

In the interval 14–23 June 2019, CINETic will host the VR segment of the TechnoMAGIQUE Festival, organized by Liminal in Bucharest, with a series of French VR artists invited to showcase their work to the Romanian public, alongside the VR experiences produced at CINETic.

LIGHTPONG @ Spotlight Festival Bucharest

LIGHTPONG is an interactive outdoor installation based on the famous 1970s PONG game, created by students from France (IAE Lyon), Germany (Faculty of Architecture Leipzig) and Romania (UNATC Bucharest) that will be presented at the Spotlight Festival in Bucharest, in April 2019.

Artists: Dorin Cucicov, Bogdan Ceangu, Octavian Albu, Grig Burloiu (Romania), Jonas Helbig, Luca Hupfer, David Kerrom (Leipzig, Germany), Thomas Bajeot (Lyon, France)



AR APP CREATED BY N+N CORSINO



produced benefits a some demandable states are















SELF PATTERNS



UNATC International

The project was aimed at increasing the visibility of the educational opportunities offered by UNATC internationally. In 2016 UNATC was rated as one of the top ten film and theater schools in the world by *Hollywood Reporter*. By setting up educational programs in English in recent years, UNATC has strengthened its leading position in the field, increasing its capacity to train international students.

The project also supported the participation of 13 students, professors and researchers from UNATC and CINETic in the following international Conferences:

- Computer Simulation of Musical Creativity Conference, Dublin, Ireland, 20–22 August 2018
- Biennale Architettura Venice, Italy, 30 august–5 September 2018
- International Conference on Intelligent Computer Communication and Processing, Cluj-Napoca, Romania, 6–8 September 2018
- IEEE International Symposium on Mixed and Augmented Reality (ISMAR) & AWE (Augmented World Expo), Munchen, Germany, 17–19 October 2018
- First Forum—USC Cinema and Media Studies Annual Graduate Conference, Los Angeles, California, USA, 18–20 October 2018
- "Projet Lumiere—Etudiants Franco-Germano-Roumains" in Leipzig, Germany, as part of the Romania-France Season, 22–26 October 2018
- Society for Neuroscience Conference, San Diego, California, USA, 3–7 November 2018
- RITMO International Motion Capture Workshop, Oslo, Norway, 12–15 November 2018
- 8th Theatre/Drama & Performing Arts in Education Conference, Athens, Greece, 23–25 November 2018
- Stereopsia—World Immersion Forum, Bruxelles, Belgium, 5–7
 December 2018



Other objectives of the UNATC INTERNATIONAL projects accomplished in 2018:

- The first participation of UNATC and CINETic in an international education fair, namely the International Education Fairs of Turkey, in October 2018. The fair hosted over 250 universities from 28 countries, including the UK, USA, Germany, Sweden, Canada, Malaysia, France, Hungary, Australia, Ireland, Switzerland, Spain, Italy, Netherlands, New Zealand, South Africa, South Korea, Malta, Poland, Czech Republic, Finland, Ukraine, Russia, Portugal, Greece, China and Turkey. UNATC was the only Romanian university represented at this international education fair, placing the university on a map of higher education institutions with academic offers in international languages, alongside reputed universities from around the world.
- The project supported the presence of 7 international experts and professors in the jury of the International Student Film Festival CineMAiubit: Zviad Dolidze (Georgia), Nicolas Khabbaz (Lebanon), Sam Lahoud (Lebanon), Asja Krsmanovic (Bosnia Herzegovina), Bulent Kucukerdogan (Turkey), Peter Muszatics (Hungary) and Csaba Bollok (Hungary).
- The publication of two brochures in English, presenting UNATC and CINETic.
- · Updating of the English version of the university website.

The UNATC INTERNATIONAL project budget was worth over 300,000 lei, and it was granted through the FDI 2018 competition.

Art and Technology in Contemporary Culture— Conference

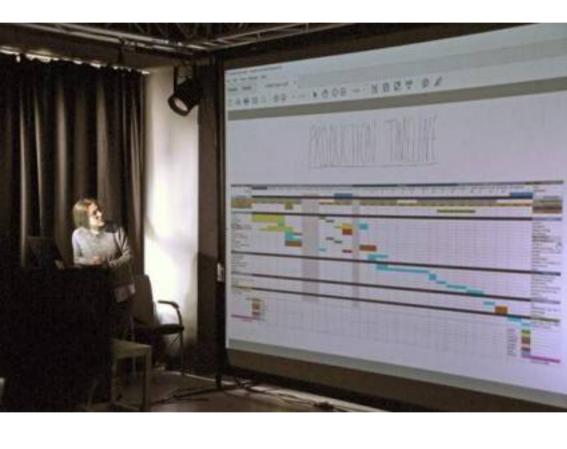
In the interval 22–26 November 2018, CINETic hosted the *Art and Technology in Contemporary Culture—Conference* dedicated mainly to doctoral students from fields as varied as theatre, performance art, film and media, architecture, visual arts, design, education, psychology and philosophy, from some of the largest academic centers in Romania—Bucharest, Cluj Napoca, Ia i, Timi oara and Sibiu.

The Conference gathered well over 25 postgraduate students (Phd and MA levels) who gave academic presentations on the theme of art and technology interaction in contemporary culture. Through these kinds of events, UNATC and CINETic seek to create a national inter-academic network of collaboration in interdisciplinary fields for the development of art research in Romania.

The Conference was organized at CINETic with the support of the Doctoral School of UNATC and it also included a series of specialized presentations and workshops carried out by researchers and research assistants from CINETic: Iuliana Gherghescu, Alexandru Berceanu, Adrian Damian, Ciprian F c eru, Marius Hodea, Ioana Mischie, Diana Vasile, Vlad Constantin.

The first edition of this Conference was held in November 2017 under the title *Theatre and Interdisciplinarity Digital Environments in Contemporary Performance*, gathering well over 70 participants form 15 universities in Romania, both students and researchers.

The Conference is an annual event at CINETic and, as of 2018, it takes the shape of a national gathering of doctoral students in various fields, at the intersection of art and technology, and with a more long term goal of publishing the results of these Conferences in an art research magazine under the aegis of CINETic.



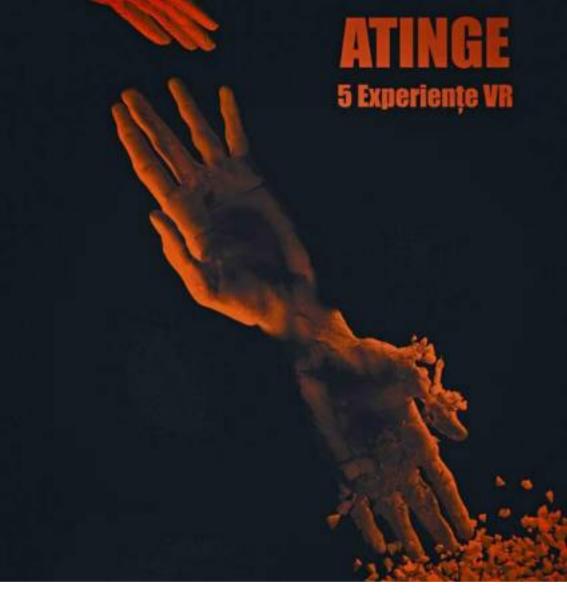
Touch— 5 VR Experiences

TOUCH is a project about experiencing in VR the conditions in which Roma communities are living around Europe, in order to foster dialogue about inequality and its consequences. Based on documentary work in Roma communities in Romania, Turkey, Italy and Sweden, the project provides insight into the challenges and successes of Roma communities.

TOUCH presents a series of 5 VR experiences: Pink Bicycle, At School, A Cup of Tea with Fred Taikon, Late, Alosarel—which were developed to raise awareness about consequences of social inequality. Starting from the concept of high-tech high-stakes, the project aimed to reach through VR experiences audiences that do not normally access the extreme living conditions that their peers face in their immediate neighborhood. In contemporary Europe, sometimes in large metropolitan areas, sometimes in rural areas, families or entire groups live in precarious and temporary conditions, often under the limits of minimum safety, insufficient heat or minimal access to water. The project is an invitation to empathy and awareness of the need to generate sustainable solutions by understanding the specificity of the issues.

TOUCH was showcased at CINETic in Bucharest in the interval 21–28 October 2018, in Stockholm between 5–9 November 2018 and in Naples between 14–16 November 2018.

The project was developed in partnership by Project 2 and CINETic, with the support of numerous partners: Kustepe Roman Sanat, E Romani Glinda, Romano Romano, Chi Rom e chi no, School No 1 commune Letca, Romano Onulus, Hatai Domlar, The Salvation Army, etc. and with the financial support of AFCN through their multi-annual financing session for 2017–2018.



Director: Alexandru Berceanu

Screenwriters: Alexandru Berceanu & Andreea Chindris

Director of photography: Boroka Biro 3D graphic designer: Marius Hodea Editing: Bogdan Alexandru Sound & mixing: Ciprian Vishan Documentary: Andreea Chindris

Chamber crew: Boroka Biro, George Ni VR coordinator: Ciprian F c eru

Programmers: Grigore Alexandru Burloiu, Andrei Ungureanu

Sound design: Mihai Gheorghiu

Project managers: Roxana Garet, Andreea Chindris

Accountant: Contab Consult

Games & Politics Game Jam

Between 12–14 October 2018, in partnership with the Goethe Institute in Bucharest and RGDA (Romanian Game Developers Association), CINETic co-organized a Game Jam entitled *Games and Politics*. Participants competed in designing games on three themes: *rulers*, *hatred* and *citizens*, under the guidance and with the help of a variety of mentors from CINETic, but also NGOs active in politics and social issues, and game development companies.

The *Games & Politics Game Jam* gathered in competition four teams, each of them having a playable game at the end. *Fair Race* was voted as the most popular game by the participants, and it was a race against prejudices and social bias, especially towards minorities. Another popular game created during the 48-hour jam at CINETic was *Power vs Voices*, inspired by recent sexual abuse cases and aimed at raising awareness about these issues, the theme reflecting also the good gender ratio this Game Jam had.

The Game Jam was associated with the "Games and Politics" Exhibition presented in October 2018, at the Goethe Institute Bucharest and developed by ZKM alongside Goethe-Institutes worldwide, with the aid of MIT Campus, The Stata Center, and the Boston Cyberarts Gallery.

CINETic is an active partner in developing the game design potential in Romania and will organize similar activities in the future, with a first Global Game Jam scheduled for January 2019, in partnership with Game Heroes and RGDA, where we expect around 100 participants.

Partners: RGDA (Romanian Game Developers Association), ARDOR, Critique Gaming, Democratic Federation of Roma from Romania, INI IATIVA ROMÂNIA, Smart Everything Everywhere, Bucharest Global Game Jam, România100



Spatial Memories of Future Past

Spatial Memories of Future Past is an immersive visual installation developed at the CINETic CAVE automatic virtual environment, conceptualized and created by Ciprian F c eru. It uses a Kinect V2 sensor and it can also be experienced through a dedicated app on an ACER Windows Mixed Reality headset.

Spatial Memories of Future Past transposes the public in a virtual world and explores the intimate relations that we have with our memories of urban space. This is a journey into a virtual world, pixels, bits, tridimensional data, and fragmented memories of a place forgotten in space and time, a dreamstate suspension of disbelief.



My Life Rehearsed in One Leg

My Life Rehearsed in One Leg is a 3D stereoscopic film created as part of a larger doctoral research entitled Acting in the stereoscopic film language, conducted by Bogdan Musta—at UNATC, investigating comparative perceptions in stereoscopic and monoscopic filmmaking. The research is based on testing working methods for a direct connection in rehearsal between the director and the actor not mediated by the story or psychology of character or larger social relevance. Also, this research is completed by an unmediated connection between the actor on the screen and the audience based on the specific presence of the actor's body in stereoscopic films.

The film tells the story of a couple reunited after several months spent in different hospitals following a car accident. The recollections that should have brought them together seem to have been muffled in both their memories.

The film is showcased at CINETic in 2019 after having been presented officially during the 9th edition of the *Les Films de Cannes à Bucarest* Festival, in October 2018.

A film by: Bogdan Musta

With: Ela Ionescu, Bogdan Albulescu, Radu Romaniuc Cinematography: Barbu B l oiu and Zolt Magyari

Produced by: Axel Film Echipamente

In partnership with: CINETic and Asociatia Culturala Script



Government of Children

Government of Children is a pioneering aspirational and civic imagination-driven transmedia project that empowers children from all over the world to see themselves as leaders and to design their societal future.

So far, we have created a pilot in California and a full segment in Romania. As Romania celebrates 100 years of existence in 2018, we have invited 100 children to envision the next 100 years. This will be Romania's first transmedia civic imagination project, with the aim of being expanded gradually in more communities worldwide.

Transmedia Franchise (stereoscopic feature documentary, webseries, VR series) Created by: Ioana Mischie Produced by: Storyscapes and Studioset In partnership with: CINETic



Around the City— Augmented Reality Workshop & App

ARound the City is an innovative AR app created as part of the ARound the City—Augmented Reality Workshop in 2018, the Year of European Cultural Heritage. The project was a collaboration between CINETic, the Goethe Institute and the French Institute in Bucharest, supported by the French-German Cultural Fund and it happened in three cities in Romania: Bucharest, Cluj Napoca and Timi oara.

The ARound the City—Augmented Reality Workshop was organized at CINETic where 12 participants gathered over a period of four days and experimented with the latest AR technologies and created the ARound the City App as a tool to actively discover and interact with urban spaces through three different immersive experiences focused mainly on cultural heritage of modern extraction in downtown Bucharest (Magheru Boulevard).

Partners: CINETic, Goethe Institute, French Institute, Augmented Space Agency, A.R.C.E.N., @Unicat

Project coordinator: Ciprian F c eru



World Theatre Day @ Odeon

For the *World Theater Day* celebrated at the Odeon Theater in Bucharest, CINETic participated at the development of components of the *CULTURESC 100* app, with the support of Samsung and BRD—Groupe Société Générale. Thanks to Virtual Reality, Augmented Reality and 3D Scanning, visitors were able to experience a new way to get to experience theater.

At the heart of the whole event was the idea of presenting the history and identity of the Odeon Theater by contemporary means, AR, VR and interactive systems developed through a perfect fusion of technology and art.

The project was carried out under the coordination of Adrian Damian, Research Assistant at CINETic.



Utophobia

UTOPHOBIA is a collection of digital installations created over the course of a year at CINETic, by the students of the Master's program ITPMA. This collection of interactive digital experiences was showcased for the first time during the *White Night of Galleries in Bucharest* on October 5th 2018, as an exploration of the manner in which technology can be used to respond to certain contemporary phobias.

As a collaborative project, the project sets out to raise the subject of phobias and to explore the therapeutic potential of the digital environment. The audience experiences a unique situation through interactive artistic installations, such as VR or AR, all the while confronting certain anxiety factors within.

UTOPHOBIA

- The Gun—interactive video installation created by Bogdan Ceangu
- IAm Here—interactive installation created by Dorin Cucicov
- Box of Fears—digital installation created by Dorin Cucicov and Alina Rizescu
- Spatial Emotions—augmented reality experience created by Alina Rizescu
- Transluscent—interactive installation created by Alina Rizescu
- The Forest—gamified virtual reality experience created by Adrian T b caru
- Urban Memories of Future Past—virtual reality immersive experience created by Augmented Space Agency (Concept/visual content design: Ciprian F c eru, programming/interaction design: Dan F c eru, programming: Andrei Ungureanu, music: Dj TorentE)

Str. Tudor Arghezi 38

19:00 - 01:00

UTOPHOBIA

interactive installations

bogdan ceangu | dorin cucicov | alina rizescu adrian tabacaru | augmented space agency



CINETic Conferences

Initiated in April 2018, the *CINETic Conferences* were envisioned as a series of lectures and debates on varied themes in CINETic's area of research, from applied psychology, to neuroscience, new technologies, digital environments etc. In a broader sense, the *CINETic Conferences* aim to bring in the public space the latest research in these areas.

Some of the themes already tackled at the *CINETic Conferences* in 2018 include: "The Default Mode Network—The Window in the Brain Through which the Body can be Controlled" (Drago Cîrneci, PhD), "Reason in the Age of Post-Truth" (Marius M. Stanciu, PhD), "AR and VR in Psychotherapy" (Marius M. Stanciu, PhD), "The Brain in Dialogue with the world" (Drago Cîrneci, PhD, Adrian Titieni PhD, Livia Petrescu PhD).

Initiator: Prof. Horea Murgu, PhD Project coordinator: Elena Belciu, PhD

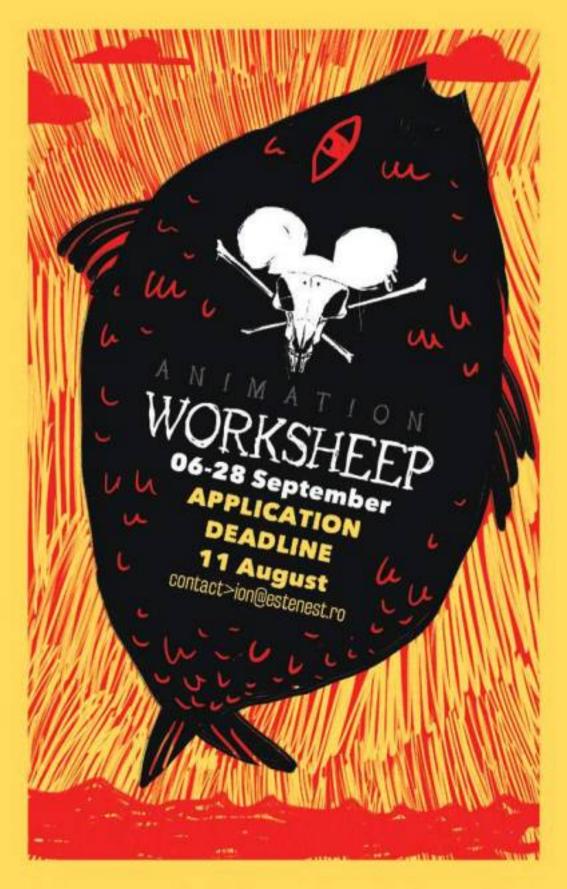
Partner: Resurse Association



2016-onwards

Animation Worksheep

ANIMATION WORKSHEEP is a non-formal training program for people with experience in animation. It was initiated in 2010 by Animest, the main Romanian animation film festival. Participants in Animation Worksheep or worksheepers, as they have come to be known, experiment and work with various animation techniques guided by an array of specialists in the field, both at national and international level, over a period of three weeks. The Animation Worksheep education platform has trained well over 100 animators that have moved on to find work in various profile studios both in Romania and abroad, gradually growing a local industry in this field. As of 2016 CINETic partnered in organizing the Animation Worksheep due to its commitment to contribute to the growth of the animation film environment in Romania and to the better professional insertion of animation programs students.



Haroun and the Sea of Stories by Salman Rushdie

Haroun and the Sea of Stories was developed during the Animation Worksheep and premiered during Animest. The colorful world of Rushdie's novel was brought to life with a mix of animation, acting and puppeteering. Fantastic and real characters, dream and reality create a singular universe in a spectacular dance. Actors tell Haroun's story animating his puppet in the trip from the valley K to the moon Kahany in his quest for peace and happiness.

Adapted by: Tim Supple, David Tushingham

Translated into Romanian by: Marius Michal Klimowicz

 $Cast: Ionu\ \ Niculae, Conrad\ Mericoffer, George\ Rotaru, Alexandra\ Badea,\ Vlad$

Basarabescu, Victor peanu, Ana Cr ciun Lambru

Directed by: Alexandru Berceanu

Sets: Mihai P curar Costumes: Cristina Milea

Puppet design and manipulation: Ana Cr ciun-Lambru

Light Design: Alexandru Berceanu

Music: Simona Strungaru, Sebastian Burneci

Animated visuals made by Animation Worksheep, the animation workshop powered by Anim'est (Trainer Worksheep: Dan Panaitescu, Miahi P curar)



LdaVi CINETic Practice

Within this project funded by the Ministry of National Education (total budget of 200,000 lei), a series of internships have been carried out at CINETic, aiming at building an intersection between teachers and students, the production environment and the increasing research capacities of CINETic, rallying them to the international standard of the aimed fields. Within the project the following four modules took place:

Video Mapping in Scenography Workshop

In July–August 2017, CINETic together with Aural Eye Visions Studio organized a workshop on "Video Mapping in Scenography". The organization of this workshop started from the desire to draw attention to the various ways of using video projection as a layout component. The participants have learned how to develop a project of this kind and how to widen their perspective on the mechanisms of these techniques, discovering the technical details necessary for the implementation of an adaptable project for different spaces and contexts. At the end of the workshop, a team of participants made an installation and a video mapping project under the title *Lifespike*, which was presented at the Amural Festival in September 2017, in Brasov.

Participants: 5 students from the Stage Design Department of UNATC and 4 students from other universities.

Partners: UNATC, Aural Eye Visions Studio, Epson

CAVE Hackaton

In June–July 2017, CINETic organized a hackathon open to all programmers and designers interested in the interdisciplinary universe of virtual reality and border technologies. The participants experimented with the 3D immersive projection system CAVE-CIN and developed a virtual environment inspired by "Alice adventures in Wonderland". The final project, *Alice in VR Land*, was presented at The White Night of Galleries in October 2017.



Participants: two UNATC teachers, one Architecture teacher, 3 students Partners: NAG

LdaVI Worldbuilding Lab VR

The *LdaVi Worldbuilding Lab* was held in Bucharest, in the interval 16–22 October 2017, as a platform dedicated to the development, production and distribution of projects integrating VR/AR/MR technologies. The mission of the project was to select 30 participants in different fields who can explore transdisciplinary VR concepts under the guidance of 5 international trainers. At the end of the project four productions were made: *Eviction Notice, Surprise Party, Trapped* and *Circus Globus*.

LdaVi EEG Lab

The *LdaVi EEG Lab* was held at CINETic, in the interval 8–15 December 2017, as a series of workshops and conference with the theme "Interdisciplinary methodologies for analysis of EEG signals collected during theatrical performance". The aim of the project was to offer general knowledge on neuroscience to students in theatre and film, and to deepen the understanding of EEG usage in research in the performing arts.

The $LdaVi\ EEG\ Lab$ gathered 60 participants and 6 international researchers as speakers and trainers, at the 5 conferences and 6 workshops organized.

Meeting of the Danube Theater Schools in Sulina

In September 2017, over a period of three days, UNATC coordinated the *Meeting of Danube Theater Schools in Sulina*, attended by representatives of the local authorities in Tulcea County, representatives of the National Academy of Theatre and Film from Bulgaria, the Athanor Academy in Germany, the School of Drama in Moldova and five Romanian schools that all came together on this occasion, to explore possible cooperation mechanisms in this geographical region.

The foundations for cooperation within a Danube network infrastructure were established during these meetings which also included theatre workshops with children form the local community, technology demonstrations by CINETic, as well as lectures done by professor David Esrig and Beatrice Picon Vallin and a cinema show case of UNATC film productions.



Laboratorul de imaginar (The Imagination Laboratory)

Laboratorul de imaginar is the first interactive installation that transforms the reading experience into a projection show, offering visitors the opportunity to interact with a series of works written by famous science fiction authors through augmented reality.

The installation, designed by Adrian Damian, research assistant at CINETic, uses neural headsets to measure brainwaves and turn them into visual projections, based on the intensity of the reader's emotions at the time of reading.

More than 2,000 visitors experienced and viewed the installation in 2017 at the Gaudeamus Book Fair in Bucharest, Cluj Napoca and Timi oara, being able to see in real-time what the reading effect on their brain was.

In the interval 14–18 November 2018, *Laboratorul de imaginar 2.0* was presented at the Gaudeamus International Book Fair in Bucharest as an augmented reality experience giving visitors the opportunity to experience new ways of reading with the help of several integrated technologies, including Hololens glasses and LEAP Motion sensors for the movement of hands.

Partners: CINETic, Les Ateliers Nomad, Aural EYE, TPS_Engage, BRD—Groupe Société Générale



Bucharest 41 Virtual Tour

BUCHAREST 41 Virtual Tour is a VR project that combines composite techniques to create an immersive stereoscopic product. The three virtual experiences start from historical facts and real people during the Bucharest Pogrom of 1941: Jilava Forest, The Great Cleaning and Iron Guard Meathalls

Jilava Forest was first exhibited at the Romanian VR Pavilion at the Cannes Film Festival in 2016.

The project was funded through the "Bucharest Participatory City" Cultural Program of the Bucharest City Hall and the ARCUB Cultural Projects Center, in partnership with CINETic, and was built starting from a performance produced under the same title at the Jewish State Theater.

Music: Raluca Ioan Costumes: Andrei Dinu

Script: Andreea Chindri , Alexandru Berceanu, Alexa B canu

Directing: Alexandru Berceanu Cinematography: Liviu M rghidan Editing: Bogdan Alexandru Graphics: Marius Hodea

VR development: Ciprian F c eru

Grading: Mircea Crivoi Sound: Mihai Gheorghiu

Cast: Liviu Lucaci, Andrei Bibire, Mircea Dragoman, Monia Pricopi, Mihai

Prejban, Darius Daradici



Me. Shakespeare

EU.Shakespeare, work in progress-A play between illusion and truth

The *EU.Shakespeare* research project consists of creating a theater show using multimedia tools and state of the art technology—real time video mixing, video mapping, 3D technology, editing, live broadcasting, retro-projection—for the production of fictional realities. The show is like a book that encompasses a whole multidimensional universe between any of its two pages. One actor, Constantin Dogioiu, plays four different moments from Shakespearean drama—two from Hamlet, one from Othello and Richard III's first monologue. The set is transposed to a green screen, in real time, everything being filmed and edited live.

The performance aims to explore the perspectives that the artist can play with, while the spectator goes through this multidimensional route, as a direct participant in a succession of fictional realities born out of Shakespeare's work.

Coordinators: Liviu Lucaci and Costin Dogioiu

Cinematography: Matei Sopterean Production: Teodora Petrescu Scenographer: Madalina Sandu

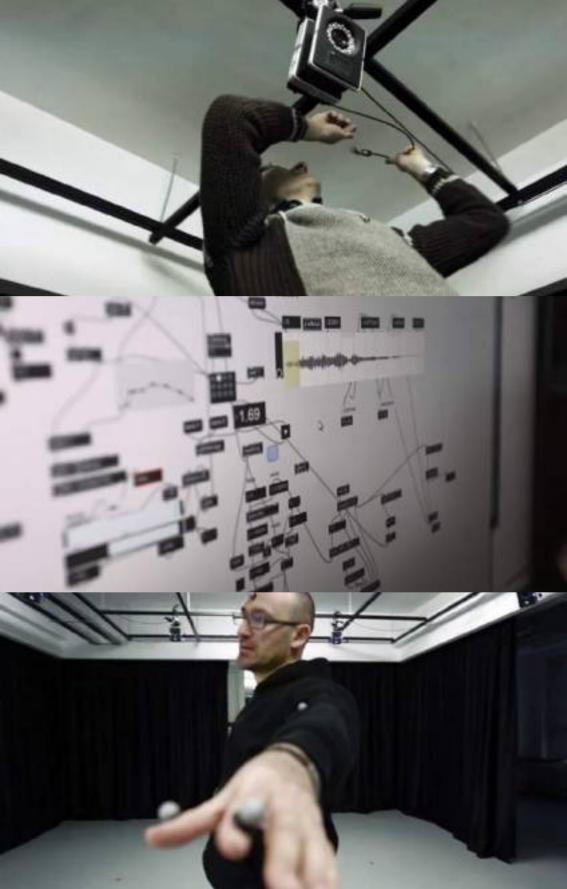
Actor: Costin Dogioiu



Soundthimble

SoundThimble is a design platform for layered sonic interaction based on the relationship between human motion and virtual objects in 3D space. A Vicon motion capture system and custom software are used to track, interpret and sonify the movement and gestures of a performer relative to a virtual object. SoundThimble explores three possible interaction dynamics, centred on object search, manipulation and arrangement, as well as the resulting possibilities for layered structures and extended perception and expression. The software developed is open source and portable to similar hardware systems, leaving room for further extension of the interaction mechanics.

"Structured interaction in the SoundThimble real-time gesture sonification framework", article by Grig Burloiu (CINETic), Stefan Damian (CINETic), Bogdan Golumbeanu (CINETic), Valentin Mihai (Polytechnic University in Bucharest) was first presented in August 2017, at the prestigious AudioMostly Conference in London, UK.



Bird in Space

MA graduation work by Eranio Petruska, student in Light and Sound Design. Within this participatory generative art installation, sound is generated through spatial closeness to the axis of the *Magic Bird* inspired by Constantin Brâncu i's work, creating an interactive digital interpretation of the master work. The interaction is generated with a Kinect device.



Interaface

Interface was the first project developed by CINETic in partnership with dramAcum, an NGO founded in 2000 by, at that time, students in directing Andreea V lean, Radu Apostol, Gianina C rbunariu and Alexandru Berceanu. In the performance interface sound scape was generated in real time from EEG, monitored simultaneously from actors and spectators. In 2016 a real time algorithm was developed for detecting changes in the emotional states of the monitored spectators, through the analysis of changes in alpha waves in the prefrontal cortex. The shifts in emotional states were mapped by the change of colours of the lights.



CINETic Partners

ROMANIAN PARTNERS

ADFR (Romanian Film Development)

Amber

AMC

Anim'est

Animation Worksheep

ARCEN

ARCUB

ARDOR

Augmented Space Agency

Aural EYE

BRD-Groupe Société Générale

Bucharest City Hall

Bucharest Global Game Jam

CGArtefacts

Chi Rom e chi no

Creative VR

Critique Gaming

Democratic Federation of the Roma in Romania

dramAcum

E Romani Glinda

Electronic Arts

Estenest-cultural association

Game Heroes

Gameloft

Gateway VR

Goethe Institut

ICR (Romanian Cultural Institute)

Ini iativa România

Institut Français

Jewish Theater

Kustepe Roman Sanat

Les Ateliers Nomad

MNAC (National Museum of Contemporary Art)

National Theatre Bucharest Odeon Theater Bucharest

Proiect 2

Radio Romano

Resurse Association

RGDA (Romanian Game Developers Association)

Romano Onulus, Hatai Domlar

România 100

School No 1 commune Letca

Script—cultural association

Smart Everything Everywhere

Storyscapes

Studioset

Sulina City Hall

The Institute

The Salvation Army

TPS_Engage

Ubisoft

UNFINISHED Festival

University of Bucharest

VRARA, global VR/AR Association

INTERNATIONAL PARTNERS

Mirage Festival, Lyon, France

Fête des Lumières, Lyon, France

NN Corsino-SCENE44, Marseille, France

Platforme de la Jeune Creation Franco-Allemande, France

Stereolux, Nantes, France

Athanor Theatre Academy, Passau, Germany

Carcea Lab, Rutgers New Jersey Medical School University, USA

Kavli Institute for Systems Neuroscience—Doeller Lab, Norway

CINETic Equipment

PROTOTYPING

- CNC ROUTER Muticam series 3000
- Printer 3 D Stratasys Oject Prime

FILMING EQUIPMENT

- · 2 sets ALEXA SXT with optics Arri compact primes
- 1 set ARI Anamorphic
- · Zoom anamorphic lenses Angenieux Optimo
- 1 Camera RED DRAGON
- 1 optic set LEIKA SUMICRON
- Rig 3D Steroetec mid size
- Camera Movement Control Equipment
- Modula on tracks Mr Mocco
- Animoko Mr Mocco
- Physiological Monitoring Equipment
- EEG mobile 68 channels ANT Neuro
- EEG stationary 256 channels ANT Neuro
- · Eyetracking SMI glasses

MOTION CAPTURE

- Vicon system with 8 cameras TS 5 megapixeli plus 2 bonita cameras
- · Facial motion capture Cara system
- 2 Virtual Cameras

VIDEO POSTPRODUCTION

- Coloring Videoprojector Barco DP4KP
- Coloring Console DaVinci

SOUND RECORDING AND POSTPRODUCTION

- Mixer
- · Nuage Master
- Nuage Fader
- Nuage Workspace Small
- JL Cooper Nuage Surround Panner
- Yamaha XM4080 Amplifier
- Yamaha P3500S Amplifier
- Yamaha MTX5D Matrix Processor
- Audio System:
- Dynaudio Monitors BM6 MKIII
- JBL 3678 HF+LF Screen Channel System
- JBL 3635 Cinema Subwoofer System
- JBL 8320 Compact Cinema Surround Speaker
- Monitor Yamaha DXR 8
- Software Nuendo 7
- · Ableton Push
- Microfon Schoops CMIT 5V

LIGHTS

- Arri Led 500W
- KOLORJET Xenon 4K
- KOLORJET Xenon 7K
- K5600 Kit Joker Bug 400
- FRESNEL CU BEC HMI 9KW K5600 Alpha 9K
- SwissLas PL-6500RGB Compact

MULTIFUNCTIONAL HALL

- Digital Mixer Yamaha QL1
- 8 mics Microfon Line 6 XD-V75L
- Ableton Push
- Speakers Yamaha IF2112/95, subwoofers Yamaha IS1215

UNATC

National University of Theatre and Film "I.L.Caragiale" 75–77 Matei Voievod Street, 021452 Bucharest, Romania

Phone: +4021 252 5881 Email: rector@unatc.ro

unatc.ro

CINETic

 $International\ Center\ for\ Research\ and\ Education\ in\ Innovative$

Creative Technologies

3B Tudor Arghezi Street, Sector 2, Bucharest, Romania

Phone: +4021 371 1200

Email: secretariat.cinetic@unatc.ro

cinetic.arts.ro

EDITORIAL BOARD

Nicolae Mandea Alexandru Berceanu Elena Belciu Alexandra Blejan

IMAGES

UNATC & CINETic Archives

PRINTING HOUSE OLLIE GANG SHOP

DATE

2018/2019

Title of the program

Sectoral Operational Program "Increasing the Economic Competitiveness"

Title of the project

"INTERNATIONAL CENTER FOR RESEARCH AND EDUCATION IN INNOVATIVE CREATIVE TECHNOLOGIES—CINETIc"

Funding contract

SOP IEC 652/27.06.2014 (RON 39.546.495)

Priority Axis 2

"Research, technological development and innovation for competitiveness" 2.2 Investments for RDI O 221. Development of the existing R&D infrastructure and creating new R&D infrastructures (laboratories, research centers) Operation 0221–2013 with ID1957.

SMIS Code 49187







Universitatea Națională de Artă Teatrală și Cinematografică "I.L. Caragiale" din București este o instituție publică de învățământ superior finanțată de Ministerul Educației Naționale.

