# Curriculum Vitae

**Amalia Foka**
Assistant Professor
Computer Science: Multimedia Applications for the Arts
Department of Fine Arts & Art Sciences
University of Ioannina, Greece

## Personal Information

Date of Birth    : 11/03/1976
Address          : Office 254, Department of Fine Arts & Art Sciences, University of Ioannina
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## EDUCATION

[2005]          **Ph.D. in Computer Science**
                Department of Computer Science, University of Crete, Greece
                Thesis Title: Predictive Autonomous Robot Navigation
                Supervisor: Panos Trahanias
[1999]          **M.Sc. in Advanced Control**
                Control Systems Centre
                Department of Electrical Engineering & Electronics
                University of Manchester Institute of Science and Technology (UMIST), UK
[1998]          **B.Eng. in Computer Systems Engineering**
                Department of Electrical Engineering & Electronics and Department of Computation
                University of Manchester Institute of Science and Technology (UMIST)

## HONORS AND AWARDS

[1999 – 2005]   **Institute of Computer Science – Foundation for Research and Technology (ICS-FORTH)**
                Researcher-postgraduate student fellowship for participation in project implementation
                of the FORTH Research and Development Program.

[1998 – 1999]   **Engineering and Physical Sciences Research Council (EPSRC)**
                Post-Graduate Fellowship for tuition fees.

[1998 – 1999]   **UMIST Academic Development and Research Committee (ADRC)**
                Post-Graduate Fellowship for postgraduate thesis.

## ACADEMIC POSITIONS

[2014 – present]    **Assistant Professor,** Department of Fine Arts & Art Sciences, School of Fine Arts, University of Ioannina, Greece, of **Computer Science: Multimedia Applications for the Arts** (FEK 820/Γ/30-06-2014).

[2015 – present]    **Adjunct Teaching Staff** for the supervision of Postgraduate Thesis for the MSc in Information Systems, School of Science and Technology, Hellenic Open University, Greece.

[2014 – 2016]    **Adjunct Research Staff**, Greek School Network and Networking Technologies Directorate (GSN-NTS), Computer Technology Institute (CTI), Greece.

[2005 – 2014]    **Teaching Staff,** Technological Educational Institute of Western Greece.

[2005 – 2013]    **Adjunct Assistant Professor,** Department of Computer Engineering & Informatics, University of Patras, Greece.

[2011 – 2012]    **Adjunct Teaching Staff** for the supervision of Postgraduate Thesis for the MA in Graphic Arts - Multimedia, School of Applied Arts, Hellenic Open University, Greece.

[2009 – 2010]    **Adjunct Teaching Staff** in the postgraduate course of the Department of Computer Science & Technology, University of Peloponnese, Greece.

[2007 – 2008]    **Adjunct Assistant Professor,** Department of Computer Science, University of Ioannina, Greece.

[2005 – 2007]    **Adjunct Lecturer,** Department of Computer Science, University of Ioannina, Greece.

## Exhibitions

2021     A. Foka, Breaking the Silence: Machine Learning Identified Taboos. 19th Media Art Biennale WRO 2021 REVERSO. 12-15 May 2021. To appear. https://wro2021.wrocenter.pl/en/works/breaking-the-silence/

## Publications

### I. Books
2016     A. Foka, Predictive Autonomous Robot Navigation: POMDPs for robot navigation with integrated human motion prediction, LAP LAMBERT Academic Publishing, (ISBN: 978-3659880070).

### II. Chapters in Books
2016     A. Foka, Who takes command?, in Thanasis Moutsopoulos (Ed.), Art | Non Art / REculture 4, Pikramenos, 2016, ISBN: 9789606628832.

### III. Scientific Journals
2021     A. Foka, Constructing an Artworld Influencers Network by Mining Social Media, Leonardo Journal (MIT Press). Accepted for publication. To appear.

2020     K. Tsekoura and A. Foka, Classification of EEG Signals Produced by Musical Notes as Stimuli, Expert Systems with Applications, Volume 159, 30 November 2020, 113507. https://doi.org/10.1016/j.eswa.2020.113507

2018     A. Foka, An artist ranking system based on social media mining, Information Retrieval Journal, Vol. 21, Issue 5, pp 410-448, 2018. https://doi.org/10.1007/s10791-018-9328-z

2010     A. Foka and P.E. Trahanias, Probabilistic Autonomous Robot Navigation in Dynamic Environments with Human Motion Prediction, International Journal of Social Robotics, Vol. 2, No. 1, pp. 74-94, 2010. (83 citations)

2007     A. Foka and P.E. Trahanias, Real Time Hierarchical POMDPs for Autonomous Robot Navigation, Robotics and Autonomous Systems (RAS) Journal, Vol. 55, Issue 7, pp. 561-571, 2007. (137 citations)

### IV. Conferences
2021     A. Foka, Computer Vision Applications for Art History: reflections and paradigms for future research, In Proceedings of the International Electronic Visualisation & the Arts (EVA London) Conference, 5th–9th July 2021, London, U.K. / Online.

2020     A. Foka, Breaking the Silence: Machine Learning Identified Taboos, *Interdisciplinary Conference Taboo – Transgression – Transcendence in Art & Science (TTT20)*, 26-28 November 2020, University of Applied Arts Vienna/Online.

2020     A. Foka, Forging Emotions, Technarte 2020 Art & Technology International Conference, 12-13 November 2020, Los Angeles/Online.

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| 2019 | A. Adamopoulou and A. Foka, Thoughts (or a discussion) on the history of art in a digital environment, Sixth Conference of History of Art: Periods of Crisis and Paradigm Shifts, November 22-24, 2019, Benaki Museum, Athens, Greece. |
| 2019 | A. Foka, The Invisible Structures of the Artworld. In Proceedings of Artech 2019, 9th International Conference on Digital and Interactive Arts (ARTECH 2019), October 23–25, 2019, Braga, Portugal, 2019. https://doi.org/10.1145/3359852.3359940 |
| 2019 | A.Foka, Social Media Mining for the Analysis of the Artworld, 107th College Art Association of America (CAA) Annual Conference, Art and Artificial Intelligence Session, New York, USA, 13-16 February 2019. |
| 2017 | A. Foka, How would a School of Fine Arts curriculum be formed with the problem-solving logic of an engineer?, International Scientific Conference: For a School of Visual Arts in the 21st Century, Florina, Greece, 12-14 May 2017 |
| 2007 | P. Liatsis, A. Foka, J.Y. Goulermas and L. Mandic, Adaptive polynomial neural networks for time series forecasting, Int. Symp. ELMAR'07, September 12-14, Zadar, Croatia, pp.35-39, 2007. (6 citations) |
| 2005 | A. Foka and P.E. Trahanias, Real Time Hierarchical POMDPs for Autonomous Robot Navigation, IJCAI Workshop Reasoning with Uncertainty in Robotics, Edinburgh, Scotland, 30 July 2005. (10 citations) |
| 2003 | A. Foka and P.E. Trahanias, Predictive Control of Robot Velocity to Avoid Obstacles in Dynamic Environments, IROS 2003, IEEE/RSJ Intl. Conf. on Intelligent Robots and Systems, Las Vegas, USA, Oct. 27 - 31, 2003. (43 citations) |
| 2002 | A. Foka and P.E. Trahanias, Predictive Autonomous Robot Navigation, IROS 2002, IEEE/RSJ Intl. Conf. on Intelligent Robots and Systems, Lausanne, Switzerland, Sep.30-Oct.4, 2002. (143 citations) |

# Teaching

## I. Undergraduate Courses

[2014 – present]  **Department of Fine Arts & Art Sciences**, University of Ioannina:
Computer Science for the Arts I, Computer Science for the Arts II, Computer Science for the Arts III, Computer Science I: Introduction to Programming and Computer Technology, Multimedia Applications, Computer Science for the Arts, Digital Art Laboratory II (co-taught with Nikos Artemis).

[2005 – 2014]  **Technological Educational Institute of Western Greece:**
Databases, Image-Audio Creation, 3D Computer Graphics, Robotics, Introduction to Databases, Introduction to Computer Science, Computer Applications to Management I, Computer Applications to Management II, Computer Programming I, E-commerce, Structural Programming - C, Databases and Intelligent Business Systems, Computer Business Systems, Artificial Intelligence, Machine Intelligence, Object Oriented Programming.

[2005 – 2013]  **Department of Computer Engineering & Informatics,** University of Patras, Greece:
Introduction to Software II (Java), Introduction to Procedural Programming, Databases II, Object Oriented Programming II.

[2009]  **Department of Business Administration,** University of Patras:
Computer Programming (Java).

[2005 – 2008]  **Department of Computer Science,** University of Ioannina:
Introduction to Programming, Digital Design, Robotics.

[2005 – 2006]  **Department of Fine Arts & Art Sciences**, University of Ioannina:
Computer Science I: Introduction to Programming and Computer Technology

## II. Postgraduate Courses

[2019 – 2020]  "Exhibitions and New Technologies", at the Postgraduate Course *Curation: Theoretical and Practical Approaches* of the Department of Fine Arts & Art Sciences, University of Ioannina.

[2017 - 2021]  "Multimedia Applications for the Arts", at the Postgraduate Course *Visual Arts* of the Department of Fine Arts & Art Sciences, University of Ioannina.

[2009 - 2010]  "Graphics and Visualization", at the Postgraduate Course of the Department of Computer Science & Technology, University of Peloponnese.

[2009 - 2010]  "Artificial Intelligence", Department of Computer Science & Technology, University of Peloponnese.

## Research and Other Activities

### I. Funding

2016            Application and donation implementation from the Stavros Niarchos Foundation for the supply of equipment for the Multimedia, Digital Art and Sculpture Laboratories of the Department of Fine Arts and Art Sciences, University of Ioannina for the total amount of €44,000.

### II. Participation in funded research projects

[2016]          Participation to the research project **Virtual Microgrids for Smart Energy Networks (VIMSEN)**, 7th Framework Programme of the European Commission as research staff of the Computer Technology Institute (CTI).

[2014 – 2015]   Participation to the research project **STIRIZO** – Horizontal project to support schools, teachers and students on the way to DIGITALSCHOOL. New services of GSN Network and support of DIGITAL SCHOOL, Partnership Agreement 2014-2020 as research staff of the Computer Technology Institute (CTI).

[2007]          Participation to the research project **EVERGROW** (ever-growing global networks), 6th Framework Programme of the European Commission, Technological University of Crete (TUC).

[2004 – 2005]   Participation to the networking project **MUSCLE (**Multimedia Understanding through Semantics, Computation and Learning) of the European Commission as a PhD Student at the Institute of Computer Science, Foundation For Research & Technology (ICS-FORTH).

[2002 – 2004]   Participation to the research project **WEBFAIR** (Web Access to Commercial Fairs through Mobile Agents), 5th Framework Programme of the European Commission as a PhD Student at the Institute of Computer Science, Foundation For Research & Technology (ICS-FORTH).

[2001]          Participation to the research project **TOURBOT** (Interactive Museum Tele-presence through Robotic Avatars) 4th Framework Programme of the European Commission as a PhD Student at the Institute of Computer Science, Foundation For Research & Technology (ICS-FORTH).

[1999 – 2001]   Participation to the research project **DRIVER** (Integrated System for Assistive Navigation of Robotic Wheelchair Platforms) of the General Secretariat for Research and Technology (GSRT) as a PhD Student at the Institute of Computer Science, Foundation For Research & Technology (ICS-FORTH).

## III. Thesis Supervision

**Participation in supervising committees of PhD Thesis**

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| in progress | Computational Design at the 4th Industrial Revolution: Artificial Intelligence and Computational Creativity in Architectural Design, Emmanouil Vermisso, **Department of Architectural Engineering, University of Patras**. |

Participation in the supervising committee consisting of Aikaterini Liapi, Professor at the same department, 2. Kate Jeffery, Professor at the Institute of Behavioural Neuroscience, University College London and 3. Amalia Foka, Assistant Professor at the University of Ioannina.

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| in progress | Study of social behaviors / patterns in educational settings, Georgios Vakalis, **Department of Computer Science & Technology, University of Peloponnese**. |

Participation in the supervising committee consisting of Christos Tryfonopoulos, Associate Professor of the same department, 2. Aggeliki Antoniou, Honorable Researcher at the University College London and 3. Amalia Foka, Assistant Professor at the University of Ioannina.

**Supervising postgraduate and undergraduate thesis**

[2020]    Dreamspaces – art video game, Aggelki Mitsiani, Graduate Thesis, Department of Fine Arts & Art Sciences, University of Ioannina.

[2019]    Information, Coding and Form, Penny Noutsopoulou, Postgraduate Course «Visual Arts» with the thematic of: Art and Public Space, Department of Fine Arts & Art Sciences, University of Ioannina.

[2019]    Tangram Deadly Sins: Images in public space with video mapping methods, Alexis Anagnostou, Postgraduate Course «Visual Arts» with the thematic of: Art and Public Space, Department of Fine Arts & Art Sciences, University of Ioannina.

[2019]    Twitter Event Detection, Dimitrios Kyrkilis, Graduate Thesis, Department of Computer Engineering & Informatics, University of Patras.

[2019]    Implementation of an Augmented Reality Application for mobile devices, Dimitrios Apostolopoulos, Graduate Thesis, Department of Computer Engineering & Informatics, University of Patras.

[2018]    Implementation of Conversational Agent Systems, Nikos Tsianakas, Postgraduate Thesis, «MSc in Information Systems», Hellenic Open University.

[2018]    Finding Topics and Predicting Trends from Texts, Christos Karatzios, Postgraduate Thesis, «MSc in Information Systems», Hellenic Open University.

[2018]    Forecasting consumer price index with Twitter data, Konstantinos Nikou, Postgraduate Thesis, «MSc in Information Systems», Hellenic Open University.

[2018]        Event Detection at Twitter, Konstantinos Kappas, Graduate Thesis, Department of Computer Science & Technology, University of Peloponnese.

[2018]        Analysis of EEG signals, Konstantina Tsekoura, Graduate Thesis, Department of Computer Engineering & Informatics, University of Patras.

[2017]        Javascript fluid simulation system for HTML5 game graphics, Giorgios Arvanitakis, Postgraduate Thesis, «MSc in Information Systems», Hellenic Open University.

[2016]        Sentiment Analysis from Images, Eleni-Charikleia Christopoulou, Graduate Thesis, Department of Computer Engineering & Informatics, University of Patras.

[2012]        Interactive Graphics for Computer Course Exams, Georgios Rizos, Postgraduate Thesis, «MA in Graphic Arts - Multimedia», Hellenic Open University.

## IV. Reviews and Evaluations

[2009 – present]    **Technical Reviewer** for the international journals:
Expert Systems with Applications (ESWA), Leonardo, IEEE Transactions on Neural Networks, IEEE Transactions on Robotics (T-RO), Autonomous Robots, Robotics and Autonomous Systems Journal (Elsevier), Information Sciences Journal ( Elsevier), Soft Computing Journal (Springer), International Journal of AI Tools (IJAIT).

**Programme Committee Member:** VISART V - ECCV 2020 Workshop on Computer VISion for ART Analysis, IEEE International Conference on Intelligent Robots and Systems (IROS), IEEE International Conference on Robotics and Automation (ICRA), International Conference on Autonomous Agents and Multiagent Systems (AAMAS), IEEE Int. Symposium on Approximate Dynamic Programming and Reinforcement Learning, European Signal Processing Conference (EUSIPCO), Int. Conference on Big Data Analytics, Data Mining and Computational Intelligence (BigDaCI).

[2020]    Participation in the evaluation of Erasmus+ proposals, Key Action 2 – KA2 «Strategic Partnerships». (evaluation of 10 proposals)

[2020]    Participation in the evaluation of proposals for Action 1.de.6 "Strengthening of 'green businesses & recycling' in Western Greece" in the framework of the Operational Program "Western Greece 2014-2020". (evaluation of 10 proposals)

[2019]    Participation in the Evaluation Committee for the funding of research projects of the Single State Aid Research, Technological Development & Innovation Action of the 2nd Cycle, "RESEARCH-CREATE-INNOVATE" for the thematic "Tourism, Culture and Creative Industries".

[2019]    Evaluation of proposals "**Empowering Postdoctoral Researchers**", 2nd Cycle in the framework of the Operational Program "Human Resource Development, Education and Lifelong Learning", State Scholarship Foundation (IKY).

[2018 - 2019]    EU Expert Evaluator for **H2020 Future and Emerging Technologies 2018 – 2020 (FET)**, European Commission Research Executive Agency (REA)

[2017 - 2018]    EU Expert Evaluator for **H2020 Future and Emerging Technologies 2016 – 2017 (FET)**, European Commission Research Executive Agency (REA)

[2016]    EU Expert Evaluator for **H2020 Marie Sklodowska-Curie Work Programme 2016-2017, Innovative Training Networks (ITN)**, European Commission Research Executive Agency (REA)

[2011 – 2014]    Evaluation of Investment Projects under the **New Investment Law 3908/2011**. Member of the National Registry of Certified Evaluators (NRCE - EMPA)

[2013]    Evaluation of proposals in the category of Actions "**Graduate Knowledge Updates Program**". Special Management Service for the Operational Program "Education and Lifelong Learning".

[2013]    Evaluation of investment proposals in the framework of the NSRF "**Support to Small and Medium-sized Businesses active in Manufacturing, Tourism, Trade-Services**" sector.

[2010]            Evaluation of Applications for the Action Cooperation - Act I of the Operational Program
                  EPAN II.

[2010]            Evaluation of Applications for the **Grundtvig** program. State Scholarships Foundation
                  (IKY).