NAME AND CONTACT DETAILS
Professor Eleni Mangina
B2.05, School of Computer Science
University College Dublin (UCD)
E: eleni.mangina@ucd.ie
T: (00353) 1 7162858
https://people.ucd.ie/eleni.mangina

CAREER PROFILE (Education and Employment)
Education
- Carnegie Mellon University - Robotics Lab, US, Certified Robotics Academic Training (2014)
- UCD - School of Education and Lifelong Learning, HDip in University Teaching and Learning (2006)
- University of Strathclyde, Department of Electronic and Electrical Engineering, Glasgow, Scotland, UK, PhD in Electronic and Electrical Engineering (2002)
- Univ. of Edinburgh, Dept. of Artificial Intelligence (AI), Edinburgh, Scotland, UK, MSc in AI (1998)
- Agricultural University of Athens, Athens, Greece, BSc/MSc in Agricultural Science (1996)

Professional Positions held:
- IRC National Expert for the CHIST-ERA European Network **(2020 - present)**
- **Professor in School of Computer Science, UCD (2020 - present)**
- Deputy Vice Principal (International) - College of Science, UCD (January 2017 - present)
- **Associate Professor in School of Computer Science, UCD (2007 - 2020)**
- **Lecturer in School of Computer Science, UCD (2002 - 2007)**
- External Examiner - Dublin Institute of Technology (2017 - present); Waterford Institute of Technology (2012 - 2016); Griffith College Dublin - (2007 - 2010)
- Director of the Springboard Courses in ICT (HEA funded - NFQ 7,8,9) (2011 - 2013)
- Director of the Higher Diploma in Computer Science (HEA funded - NFQ 8) (2007 - 2008)

Maternity Leave Dates:
- 2008 (April – October); 2009 (November – May); 2012 (January – July)

KEY ACHIEVEMENTS IN RESEARCH EXCELLENCE & IMPACT

A. Key Achievements in the Generation of Knowledge
I have secured in excess of circa EUR5 million in research funding as Principal Investigator from exchequer (Science Foundation Ireland, Irish Research Council, Enterprise Ireland) and non-exchequer (Horizon 2020, Erasmus+) sources. My latest success is the first for UCD coordination in ICT call for one of the most competitive Horizon 2020 call for proposals, (ICT-25-2018-2020 (Interactive Technologies) 9.88% acceptance rate (ERC 12.7% for the same year)), with the highest attainable score of ESR 15/15 from the evaluators My funding portfolio has resulted in more than 190 publications (conference, books and journals). Due to the level of innovation within the knowledge generated under my supervision, the following IDFs have been registered:
- **UCD Disclosure Form of Intellectual Property – "Multi mode Control of Multiple Drones Using Software Defined Radios": (E. Mangina Contribution: 33.3%) –** Current discussions with Nova UCD regarding licensing and patent application.
- **UCD Disclosure Form of Intellectual Property - "Through the Looking Glass technologies":** Use of a mixture of different projectors, screens and tracking technology to look into the Virtual world without the current limitations of VR head mounted displays. **(E. Mangina Contribution: 20%)**
- **UCD Disclosure Form of Intellectual Property - "3D Learning Objects for VR/AR education and training":** Learning objects with focus on the 3D element of knowledge components within emerging VR/AR educational ecosystems. **(E. Mangina Contribution: 50%)**

B. Key Achievements in the Development of Individuals
I have supervised 5 PhD students to completion, trained 4 PostDoc researchers, 3 Research Assistants and 2 Project Managers. I currently supervise 6 PhD students, 4 co-supervised PhD students and 2 PostDocs. Project teams that I have supervised are evaluated from the funders (i.e. European Commission) with

excellent results and as an example my latest coordinated project AHA has earned a widespread acclaim and reputation, with excellent feedback from experts in the fields across the US, UK, Europe and Canada regions and reached the top 20 finalists at 2018 International AWE Awards. The project has won the Best Research project award from Education Awards 2020 in Ireland. I have led and continue to lead the Athena SWAN Bronze award application, with 24 Self-Assessment Team (SAT) members (since 2018), which has resulted to the increase of successful applications for promotions. This role has resulted to a number of achievements including:

* Introduction of a SMART action plan for School gender equality
* **Introduction to staff support scheme returning from maternity** or long-term leave

C. Key Achievements Supporting Broader Society & the Economy

As the UCD Springboard ICT courses director (2011-2013) I organised the Opportunities Day (2013) where speed networking sessions took place which promoted interactions of our students with industry. As Athena SWAN Bronze award application chair for the School of Computer Science and EDI staff representative my achievements have transformational results for staff career development which include: (i) Organisation of yearly student and staff surveys and focus groups to identify any issues that need to be addressed and actioned; (ii) Organisation of Imposter Syndrome day every academic year for female staff; (iii) Initiated School book club to enhance leadership, motivation and well-being at work place; (iv) Co-founder and active member of Women@CompSci network, providing support to female students and staff; (v) Co-founder and active member of Women@STEAM college network. In 2018, I presented the study that investigated the role gender plays in making the decision to study Computer Science in University College Dublin in Ireland (background influences) and whether there is a difference in the perceived sense of belonging between the genders. (vii) Athena SWAN ECU Unit external evaluator for institutional and departmental applications since 2018.

My research has featured in National media: TodayFM (AHA pilot for Ireland); RTE documentary (November 2017) BrainTech, addressing how people with disabilities can interact with emerging technologies. My research has seen the international highlights (top 20 finalist in AWE awards 2018). I participate at meetings of UCD Development and Humanitarian Network for the development studies and humanitarian action activity in the University. I have initiated the trilateral MOU between UCD, Irish and Indian Red Cross (2016), resulting a mobile app assisting the first responders in Punjab for monitoring patients with Tuberculosis (2017). Since 2018 I am active member of UCD Sustainable Energy Community and delivered talks in the area of Data analytics for smart cities.

D. Key Achievements Supporting the Research Community

I have provided exceptional and sustained support to advance best professional practice within my interdisciplinary research and education, in the areas of emerging technologies (UAVs, VR/AR) and Applied Data Analytics. I have measurably advanced progression within my professional practice in line with the key objectives of NUID UCD 2020-2024 strategy, in order to further develop our world-class facilities in support of NUID UCD's vision and build our research engagement locally, nationally and internationally by: Delivery of invited keynote presentations; Serving as key member to the key organisations in Computer Science and emerging technologies (IEEE; IEEE Standards Association, IEEE ICICLE XR; IEEE Smart Cities Community; IEEE Digital Senses Community; IEEE Women in Engineering Membership; Unmanned Aircraft Association of Ireland (UAAI) member; RDA (Research Data Alliance) member in Ireland; Ireland India Business Association member; Humanitarian UAV Network, UAViators member; European Emergency Number Association (EENA) Drone working group member; European Society for Cognitive Systems. Contribution within UCD SIRC office infrastructure development for the set of requirements of drones' usage by UCD personnel and the Drone User Flow Chart (based on SI 563 (2015) IAA Small Unmanned Aircraft (Drones) And Rockets Order) in 2016. The strategy for drones. operations within NUID UCD has advanced as best research practice within the university since then. I extensively contributed as a co-author of the European Emergency Number Association (EENA) operations document for Remote Piloted Airborne Systems (RPAS) and the Emergency Services (Section 7: Privacy and Safety) in 2015.

a. Member of the IEEE VR/AR standards working group under the chairman Prof. Yu Yuan https://standards.ieee.org/develop/wg/VRAR.html
b. Member of IEEE Industry Consortium on "Learning Engineering", International Working Group on XR (VR, AR, MR) for Learning and Performance Augmentation. Learning Engineering involves the application of iterative, human-centered design approaches along with data-driven techniques

and principles from the learning sciences to the development of technology-based learning solutions. https://www.ieeeicicle.org/xreality-sig

c. Member of Women on Wearables: https://www.eventbrite.com/e/women-of-wearables-professional-networking-is-rocking-again-tickets-46881421594

d. IEEE GEM 2018, Track Chair of VR/AR technologies for Teaching and Learning through GEM: http://sites.ieee.org/ieeegem/education-learning-through-gem/

e. IEEE TALE 2018, Engineering Next Generation Learning, Track Program Committee member: https://www.tale2018.org/

Google award on best MSc Software Engineering project, UCD (2016) - ("Genie: Gamification platform for third level education") & UCD President's Teaching Award (October 2005)

Grant Funding History: [Principal (PI) or Partner (P) or Collaborator (C)]

Awarding Authority	Total Amount	PI/P/C	Date	Peer review (Y/N)
Erasmus+ KA2	€380,480	P	2019	Y
Erasmus+ KA2	€274.898	PI	2019	Y
Horizon 2020 – ICT25	€3,935,035	PI	2019	Y (ESR 15/15)
Enterprise Ireland – Coordinator Support	€11,912	PI	2018	Y
Horizon 2020 – CNECT	€397,575	PI	2017	Y (92%)
Erasmus+ KA2	€447,760	P	2017	Y
IRC (Funded PhD student: Evan O'Keeffe)	€94,550	PI	2014	Y
UCD Seed Funding Scheme	€11,318	PI	2014	Y
Enterprise Ireland – Coordinator Support	€8,275	PI	2014	Y
MSCA Innovative Training Networks (ITN) TRUSS	€3,700,000	C	2014	Y
Erasmus TOI Leonardo	€45,622	PI	2013	Y
EU-FP7 "COBWEB: Citizen Observatory Web"	€997,111	C	2012	Y
Erasmus TOI Leonardo	€45,622	PI	2013	Y
HEA Springboard Initiative	€595,000	PI	2012	Y
HEA Springboard Initiative	€375,000	PI	2011	Y
Erasmus Teaching Staff Exchange	€1,896	PI	2011	Y
EU-FP7: FIEMSER	€69,000	C	2011	Y
UCD Seed Funding Scheme	€10,000	PI	2006	Y
UCD President's Teaching Award	€7,400	PI	2005	Y
EU-FP7 PENED	€184,192	C	2004	Y
Enterprise Ireland – International Collaboration	€6,700	PI	2003	Y
HEA – Targeted Funding for Special Initiatives	€320,000	PI	2002	Y

LIST OF PUBLICATIONS

Assoc. Prof. Eleni Mangina has a track record of more than 200 publications in national and international peer reviewed conferences and international journals , including in IEEE and ACM and a number of book chapters and contributes as a committee member for reviews to many international conferences. Recent research focus includes Robotics, Remotely Piloted Aircraft Systems and Virtual and Augmented Reality applications in education through simulation and Data Analytics application for digital humanitarian applications (including energy sustainability). Detailed list of the publications can be found at:

UCD Research profiles: https://people.ucd.ie/eleni.mangina/publications
ORCHID: https://orcid.org/0000-0003-3374-0307