Aikaterini (Katerina) Bagiati

abagiati@mit.edu, MIT, 600 Technology Square NE49, Cambridge, MA, 02139
Research Scientist – MIT Open Learning

EDUCATION

Purdue University, School of Engineering Education, West Lafayette, IN   July 2011
Doctorate Degree
- Thesis Title: Early Engineering – A developmentally appropriate curriculum for young children

Aristotle University of Thessaloniki, Department of Electrical and Computers Engineering, Thessaloniki, Greece
Interdepartmental Master's Program in "Advanced Computer and Communication Systems"   March 2005
Diploma in Electrical and Computer Engineering   September 2000

PROFESSIONAL EXPERIENCE

Massachusetts Institute of Technology   Aug 2014- today
- *Research scientist* – **MIT Open Learning**
  - Conduct research on STEM learning and assessment at the K-12 / higher education level, and in the efficacy of innovative learning technologies and pedagogical approaches.
  - Identify/ create resources to support faculty training regarding updated pedagogies/instructional design models
  - Collaborate with various initiatives in/beyond MIT Open Learning on research/development projects related to developing, supporting, and assessing national/international STEM related workshops and programs
  - Actively Collaborating with the NEET administration into co-designing and implementing the course and program assessment plan.
  - Lead series of "Consultation Clinics" and international seminars on Engineering Education Pedagogy and Innovation for J-WEL member institutions
  - Actively collaborating with the USAF-MIT AI Accelerator by conducting a pilot programmatic evaluation research in regards to the AI Education Program: Know-Apply-Lead (KAL).

Massachusetts Institute of Technology, MIT- SUTD Collaboration   Sept 2011 – Aug 2014

- *Postdoctoral Associate (STEM Curriculum and Pedagogy Specialist*)
  - Curriculum Development Coordinator for the new Singapore University of Technology and Design (SUTD) courses developed at MIT (handle content development, and accreditation issues in collaboration with the Singapore Ministry of Education)
  - Coordinator and Instructor of the *Teach the Teachers* Faculty Development Program.
    Consultant in project regarding the development of educational videos.

- o Involved in the development and the assessment related to various international educational programs/projects within the MIT-SUTD collaboration.
- o Consultant for Programs regarding K-12 STEM outreach between SUTD and Singapore middle and high schools.

Purdue University, School of Engineering Education, West Lafayette, IN   Jan 2007 – Aug 2011
- *Research Assistant* - Conduct research in the fields of Educational Software and Cognitive Devices, K12 STEM Curriculum Development, Teacher Training, Develop the *Puppeteering to Engineering* Curriculum http://www.puppetengineering.com

University of Thessaly - Department of Computer & Communication Engineering, Volos, Greece   Sept 2005 - Dec 2007
- *Course Instructor* - Instructor of the course "Didactics for Computer Science" I and II (7th and 8th semester). Course content contained traditional and alternative teaching methods, and elements of cognitive psychology, design based learning, and distance learning environments
- *Software Engineer* - Designing modules for teacher's training applications; developing and managing curriculum, producing and editing video files; creating graphical elements for distance learning applications

INTRACOM S.A. Hellenic Telecommunications& Electronics Industry, sector of Research and Development, Athens, Greece   Dec 2000 – Jun 2002
        Software Engineer- Designing software for TV applications

AWARDS
Apprentice Educator Grant from Women in Engineering Division - American Society of Engineering Education: June 2012

SELECTED INVITED SPEECHES
"Eclectic Approaches to Educational Innovation at MIT" Universidad de Los Andes, scheduled for November 2019
"Education going Digital" Institute of Education Sciences - Universita de Catalunya, March 2018
"Two years of teaching with MOOCs: Experiences and Lessons Learned" Department of Civil and Environmental Engineering: Spring Lecture Series, Florida International University, March 23, 2015

SELECTED WORKSHOPS
"**Designing an Online Course**" (March 2018) Institute of Education Sciences - Universita de Catalunya
"**Online Learning in Engineering Education : A Hands-on Workshop**" (September 2016) - SEFI 2016 Conference, Tampere Finland

SELECTED PUBLICATIONS
Sarma, S., Bagiati, A. (2020) **Current Innovations in STEM Education and Equity Needs for the Future**. Paper commissioned by the National Academies of Science, Engineering, and Medicine. Presented at the *Imagining the Future of Undergraduate STEM Education* Symposium on Nov 13, 2020

Fisher D., Bagiati, A., Sarma S. (2017) **Developing Professional Skills in Undergraduate Engineering Students Through Cocurricular Involvement.** Journal of Student Affairs Research and Practice. Volume 54 Issue 3

A. Bagiati, S Yoon Yoon, D. Evangelou, A. Magana, G. Kaloustian, J. Zhu (2015) **The landscape of PreK-12 engineering online resources for teachers: global trends.** International Journal of STEM Education, V2(1). (Available at http://www.stemeducationjournal.com/content/2/1/1)

TC. Haldi, A. Bagiati, E. Crawley (2019) "**Developing MIT's LASER -- Leadership Academy for Scientists, Engineers, and Researchers – Program**" Proceedings of the 47th SEFI Conference, 15-20 September, Budapest, Hungary

A.F Salazar-Gomez, A. Bagiati, H. Sive (2019) "**Designing a Program on Data Science while supporting faculty capacity building in Latin America**" Proceedings of the 47th SEFI Conference, 15-20 September, Budapest, Hungary