

❖ VITAE OVERVIEW

**CONTACT
INFORMATION****Arash Soleimani, Ph.D. Candidate**

Member – *The Institute for Intelligent Materials, Systems & Environments*
Clemson University Lee 1-162, Clemson, SC 29634-0503 USA
eml. arashs@clemson.edu | tel. [270-559-2820](tel:270-559-2820) | web. www.cu-imse.org

KEY WORDS**Key words defining my interests, experiences and ambition:**

Design, Research, Creative Design, Architectural Design, Usability Methods, Human-Computer Interaction, Tangible/Physical Computing, Cyber-Physical Systems, Architectural Robotics, Human Factors, and Learning Science (CyberLearning)

EDUCATION

2015 **Ph.D., Planning Design and the Built Environment** (Pending)
Clemson University School of Architecture, Clemson SC, USA
Estimated completion date: August, 2015

Advisors: Keith E. Green, Ian D. Walker, Christina Gardner-McCune, Danielle Herro

Thesis: *CyberPLAYce: A Play Space of Creative Intelligent Tools Promoting Personal and Computational Expression for Early Learners.*

Abstract: CyberPLAYce is a novel, interactive-computational construction kit comprised of hand-sized, magnetic modules, and rectangular panels that receive the modules and serve as physical building blocks for constructing cyber-physical environments imagined by children. CyberPLAYce employs four evaluation frameworks through an iterative design process including, usability studies, participatory design, ethnographic observation, and formative assessment.

2010 **Master of Architecture**
University of Nottingham Department of Architecture and Built Environment, Nottingham, Nottinghamshire, UK

Advisor: Jonathan Hill

Thesis: *Responsive and Interactive Environments in Museums: Managing Responsiveness and Interactivity within Museums and Exhibitions in a New Fashion.*

Abstract: In this thesis, the importance of interactive environments is leveraged by considering both traditional and modern technologies of interaction. The thesis examines the possibilities and challenges faced in the integration of interactive technologies within museums by considering theories and historical precedents underlying *interaction design* in exhibitions and museums.

2008 **Bachelor of Architectural Engineering**
Art University of Isfahan School of Architecture and Urban Design, Isfahan, Iran

Advisor: Mohammad Omoumi

Thesis: *The House of Photography: An Architectural Space of Learning, Experiencing and Viewing Photography.*

AWARDS

- 2013-14 **The Honor Society of Phi Kappa Phi**
Clemson University, Clemson SC, USA
Awarded the *Honor Society of Phi Kappa Phi* for excellence in research and GPA.
- 2012-15 **Clemson University Graduate Assistantship**
Clemson University, Clemson SC, USA
Awarded a *Clemson University Graduate Assistantship* for excellent qualifications and experience in the field of architecture.
- 2008 **Chancellor's Appreciation Letter**
Art University of Isfahan, Isfahan, Iran
Awarded *Chancellor's Letter of Appreciation* for excellence in architectural design and research.

PUBLICATIONS**Books**

- 2013 Arash Soleimani, **Responsive and Interactive Environments in Museums: Managing Responsiveness and Interactivity within Museums and Exhibitions in a New Fashion**, Lambert Academic Publishing, Deutschland, Germany.

Papers & Videos

- 2015 Soleimani, A., Green, K. E., Walker, I. D., Gardner-McCune, C., Herro, D. **"CyberPLAYce, a Tangible Storytelling Tool: Results from an Empirical Study with 8-10-year-old Co-Designers."** In *Proceedings of TEI'15, the ACM conference on Tangible, Embedded and Embodied Interaction*, Stanford, CA, USA, (Pending).
- 2014 Soleimani, A., Green, K. E., Walker, I. D., Gardner-McCune, C., Herro, D. **"CyberPLAYce -- A Play Space of Creative, Intelligent Tools Promoting Personal and Computational Expression for Early Learners."** In *Proceedings of DIS'14, the ACM conference on Designing Interactive Systems*, Vancouver, B.C., Canada, pp. 191-194. (Doctoral Consortium – only nine students were accepted to the DC program amongst the entire participants around the world, and the conference organizers covered the registration fee for the nine participants).
- 2014 Soleimani, A., Smith, K., Zeng, J., Green, K. E., Herro, D., Santiago, J., Sharma. S. Tonapi, M., Vijaykumar, A., Walker, I., & Garder-McCune, C. **"Learning with CyberPLAYce; a Cyber-Physical Learning Environment for Elementary Students Promoting Computational Expression."** In *Proceedings of CHI'14: the ACM Conference on Human Factors in Computing Systems*, Toronto, Ontario, Canada, pp. 165-166, (Archived Video).
- 2013 Schafer. G, Green, K. E., Walker, I. D., Lewis, E., Fullerton, S., Soleimani, A., Norris, M., Fumagali, K., Zhao, J., Allport, R., Zheng, X., Gift, R. and Padmakumr, A. **"Designing the LIT KIT, an Interactive, Environmental, Cyber-Physical Artifact Enhancing Children's Picture-book Reading."** In *Proceedings of IDC'13: the ACM Conference on Interaction Design and Children*, New York, pp. 281-284.

PUBLICATIONS

(continued)

- 2010 Soleimani, A., **Wind Towers** – Thesis-Design Project Competition: Sustainable Tall Buildings, *The Council on Tall Buildings and Urban Habitat*.

TEACHING

- 2012-15 **Lecturer** (Teaching Assistantship)
Clemson University School of Architecture, Clemson SC, USA

ARCH 101 – Introduction to Architecture

Introduction to the principles of architectural design. Collaborative foundation studio offering instruction in the specific skills of formal composition, visual communication, oral presentation, and computer literacy.

ARCH 151 – Architecture Communication I

First design studio focusing on the ability of understanding and applying the standard conventions of various graphic techniques and emphasizing on iterative process, high craft, terminology, visual communication, modeling and time-management.

ARCH 252 – Architecture Communication II

Architectural analysis and design problems with a focus on understanding site and the context of architecture. Specific investigation of place, environmental conditions, and how a building forms a relationship with landscape.

ARCH 401 – Architectural Portfolio

Senior undergraduate seminar cultivating graphic communication skills and the development a cohesive design identity. Students develop an architectural brand through a suite of portfolios (physical and digital, academic and professional, info-graphic and three-dimensional), and are guided to develop a practice of indexing, communicating and evaluating their design artifacts.

ARCH 452 – Synthesis Studio

Senior undergraduate architectural studio emphasizing an iterative, exploratory design process, the development of design concepts, and critical evaluation and discourse. Exploration through precedent research, site mapping / analysis, programming and conceptual development, culminating in a complex architectural proposal in an urban context.

ARCH 868 – Architectural Robotics (co-taught)

Graduate level architectural studio focusing on understanding, developing and testing robotic systems for the built environment. Collaborative teams of Ph.D., M.S. and M.Arch students from *Architecture* and *Electrical and Computer Engineering* developed working robotic prototypes responsive to challenges and opportunities of living in the built and natural environments today.

- 2013-14 **Student Instructor**
Clemson University School of Architecture, Clemson SC, USA

EUREKA Program

Supervised three *EUREKA* students who were accepted into the *Calhoun Honors College* for a five-week design-research project during summer. They worked on designing learning environments enhancing children's learning experience.

TEACHING

(continued)

- 2010-12 **Student Mentor/Instructor**
 University of Nottingham Department of Architecture and Built Environment,
 Nottingham, Nottinghamshire, UK
- Supervised several undergraduate architecture students with learning disabilities to pursue research and complete their studio projects. Furthermore, facilitated workshops of *Architectural-Visual Communications* teaching various architectural graphic techniques, and architectural software including AutoCAD, 3DsMax, ArchiCAD and Adobe Photoshop for modeling and animating.

LECTURES & WORKSHOPS

- 2014 **Evaluating Children's Interactive Products**
 CHI'14: the *ACM Conference on Human Factors in Computing Systems*
 Toronto, Ontario, Canada
- Lecture on design methodology, input techniques, games, context awareness, rehabilitation and end user programming guiding the design of interactive products for children.
- 2007 **Form Study and Construction of Free-style Forms**
 Tehran University School of Architecture, Tehran, Iran
- Successfully completed specialized training workshop of *Form Study and Construction of Free-style Forms with Space Structures*.

INDUSTRY EXPERIENCE

- 2010-12 **Rushcliffe Solar**
 West Bridgford, Nottingham, Nottinghamshire, UK
- Position: Researcher
- Provided householders with the advice of costs and payback to fit Photovoltaic roofs. Worked with Rushcliffe Borough Council and Energy Saving Trust (EST) providing an appraisal and estimation service for public buildings in Nottingham.
- 2010 **Rushcliffe Play Forum and Resource Center**
 Keyworth, Nottingham, Nottinghamshire, UK
- Position: Architectural Intern
- Multi-purpose Art Center for making and exhibiting art crafts made by recycled and scrap materials for children.
- 2009-11 **New Art Exchange (NAE)**
 Nottingham, Nottinghamshire, UK
- Position: Interior Designer
- Iranian Contemporary Art and Culture Exhibition
- 2006-09 **Shahr-o-Khaneh Consulting Planners, Architects & Engineers**
 Mirza Koochek Khan Blvd., Isfahan, Iran
- Position: Architectural Assistant
- Extension of Zayanderoud Recreational & Cultural Village, Isfahan, Iran
 Sheikh Bahaie University, Basic Science Department, Isfahan, Iran
 Rehabilitation and reconstruction of Doolab District, Tehran, Iran

REGISTRATION

Since 2008

Licensed Architect

Isfahan, Iran # 1010006789

SERVICE

2014

Peer reviewer, DIS'14 Doctoral Consortium (the *ACM conference on Designing Interactive Systems*), Vancouver, B.C., Canada

2010-12

Examinations Invigilator, University of Nottingham, Nottingham, UK

2006

Facilitator, research-applied project of Article 102 of Act on the third State Development Plan entitled "*Consideration of Emotional Utterance Patterns of Iranian Primary-school Students*", Isfahan, Iran