

Hesam Samimi

CONTACT INFORMATION

Nong Khai, Thailand

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<http://www.hesam.us/teaching>

INTERESTS

Technology Education for Primary and Secondary (K-12) Schools, Education of Computer Science, Programming, Artificial Intelligence (AI), Web Development, Mobile App Development, and Math, Application of AI in Programming and Software Development

EDUCATION

University of California, Los Angeles, Los Angeles, CA. USA

Ph.D., Computer Science, June 2013

- Area: Programming Languages
- Thesis Title: "From Validation to Automated Repair & Beyond with Constraint Solving"
- Advisor: Prof. Todd Millstein

M.S., Computer Science, June 2009

University of California, Berkeley, Berkeley, CA. USA

B.S., Electrical Engineering & Computer Science, May 2005

ACADEMIC EXPERIENCE

Pathumthep Wittayakarn School

Nong Khai, Thailand

Teacher

May 2019 - Present

Junior High Computer Science, English, and PE teacher for the International/English Program

BSD Education

Bangkok, Thailand

Technology Education Curriculum and Content Developer

July 2018 - May 2019

Developing new curriculum and content for teaching technology (web, mobile app, and game development, AI, databases, programming, cross curricular) to K-12 schools grades 3-12

Living Wisdom School High School, Ananda Village

Nevada City, CA. USA

Teacher

September 2017 - June 2018

High School and Junior High Computer Science, Programming, Math, Science History, Yoga and Meditation teacher

Connected Communities Academy

Nevada City, CA. USA

Instructor

April 2018 - July 2018

Programming and App Development course designer and instructor

Udemy.com Online Education

<https://www.udemy.com/user/hesamsamimi/>

Instructor

June 2017 - Present

Programming, App Development, High School and Junior High Math and Computer Science instructor on Udemey online university

Communications Design Group, SAP Labs / Viewpoints Research Institute
Los Angeles, CA. USA

Researcher **August 2013 - June 2015**
Research on the application of Artificial Intelligence in Programming Languages design, frameworks, and Software Development, advised by Dr. Alan Kay

Research Consultant **June 2008 - December 2012**

University of California, Los Angeles, Los Angeles, CA. USA

Co-Teacher **Spring 2012**
Co-Teaching a programming language design project course. Supervised and guided independent student projects related to designing new programming languages or frameworks

Graduate Student **September 2007 - June 2013**
Ph.D. research on Programming Languages advised by Prof. Todd Millstein

Teaching Assistant **Winter 2008 & Spring 2013**
Programming languages course covering fundamental CS concepts with implementations in ML, Scheme, Java, Python, and Prolog

Teaching Assistant **Fall 2007**
Software construction laboratory course introducing Linux OS, version control systems, system programming, shell scripting, and network security

Microsoft Research India, Bangalore, India

Research Intern **Summer 2010**
Research on program synthesis for distributed programming. Advised by Kaushik Rajan

INDUSTRY
EXPERIENCE

Innovation Group, Communications Dept., Ananda, Nevada City, CA. USA

Mobile App Developer **February 2016 - June 2018**
Design and development of mobile apps related to uplifting consciousness and mindfulness

Yoga and Meditation Teacher **November 2015 - June 2018**
Leading classes of yoga and meditation

Intel Corp., Santa Clara, CA. USA

Design Automation Engineer **January 2005 - June 2007**
Development, maintenance, and support for automation systems aimed at efficiency, productivity, and reliability of physical verification of design. Automation support for design engineers running Physical Verification flow on circuit blocks, including automation of tool runs, quality control, and data management

ACADEMIC
CONTRIBUTIONS

Doctoral Symposium, European Conference on Object-Oriented Programming, 2011, Lancaster, UK.

Organizing Chair **July 2011**

PUBLICATIONS

Hesam Samimi, Alessandro Warth, Mahdi Eslamimehr, Alan Borning. 2015. Constraints as a Design Pattern: from Sketchpad61 to Sketchpad14. In Proceedings of the ACM International Symposium on New ideas, New Paradigms, and Reflections on Programming & Software (Onward!15)

Mahdi Eslamimehr, Hesam Samimi. 2015. Timing Analysis of Event-Driven Programs with Directed Testing. In Proceedings of the 15th International Workshop on Worst-Case Execution Time Analysis (WCET'15)

Hesam Samimi, Chris Deaton, Yoshiki Ohshima, Alessandro Warth, Todd Millstein. 2014. Call by Meaning. In Proceedings of the ACM International Symposium on New ideas, New Paradigms, and Reflections on Programming & Software (Onward!14)

Hesam Samimi, Rebecca Hicks, Ari Fogel, and Todd Millstein. 2013. Declarative Mocking. In Proceedings of the 2013 International Symposium on Software Testing and Analysis (ISSTA'13)

Alan Kay, Ian Piumarta, Kim Rose, Dan Ingalls, Daniel Amelang, Ted Kaehler, Yoshiki Ohshima, Hesam Samimi, Bert Freudenberg, Aran Lunzer, Alan Borning, Bret Victor, and Takashi Yamamiya. 2012. STEPS toward expressive programming systems, a science experiment. VPRI NSF Technical Report, 2012

Hesam Samimi, Max Schäfer, Shay Artzi, Todd Millstein, Frank Tip, and Laurie Hendren. 2012. Automated repair of HTML generation errors in PHP applications using string constraint solving. In Proceedings of the 34th International Conference on Software Engineering (ICSE'12)

Hesam Samimi and Kaushik Rajan. 2011. Specification-based sketching with Sketch. In Proceedings of the 13th Workshop on Formal Techniques for Java-Like Programs (FTfJP'11)

Hesam Samimi, Ei Darli Aung, and Todd Millstein. 2010. Falling back on executable specifications. In Proceedings of the 24th European conference on Object-oriented programming (ECOOP'10)

Alan Kay, Ian Piumarta, Kim Rose, Dan Ingalls, Daniel Amelang, Ted Kaehler, Yoshiki Ohshima, Hesam Samimi, Chuck Thacker, Scott Wallace, Alessandro Warth, and Takashi Yamamiya. 2009. STEPS toward the reinvention of programming. VPRI NSF Technical Report, TR-2009-016, 2009

SKILLS

AI, iOS and Android Mobile App Design and Development, Swift, Java, Objective-C, Backend/Frontend Web Development, Javascript, HTML, CSS, SQL, Ruby, Python, Smalltalk, C#, C, C++, Scratch, Snap!, ..., Programming Language Design, Software Development, Testing, Verification, Validation, Automation, Unix, Linux, Yoga and Meditation Teacher