Yasha S. Iravantchi

CONTACT INFORMATION	29 Oxford St., Pierce G11B Cambridge, MA 02138	http://yasha.xyz yasha@seas.harvard.edu

RESEARCH INTERESTS	Human-Computer Interaction (HCI), Wearables, Ubiquitous Computing, Sensors, Health

EDUCATION	**Carnegie Mellon University**, Pittsburgh, PA	Starting August 2017
	Ph.D. Student, Human-Computer Interaction	
	Harvard University, Cambridge, MA	May 2014
	S.B., Engineering Sciences (Tracks: Electrical Engineering/Biomedical Engineering)	

PROFESSIONAL EXPERIENCE	**Design Specialist in Electrical Engineering**	June 2014 to present
	Active Learning Labs, Harvard University SEAS	
	Cambridge, MA	
	Product Design and Engineering Intern	Summers 2009-2012
	Design Catapult, Inc.	
	Fountain Valley, CA	

RESEARCH EXPERIENCE	**Research Affiliate**	June 2013 to present
	Intelligent Interactive Systems Group,	
	Harvard University SEAS	
	Supervisor: Prof. Krzysztof Z. Gajos	

PUBLICATIONS	1. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos, and Barbara Grosz. SwellFit: a Wearable Sensor for Patients with Congestive Heart Failure. In *Proceedings of the Workshop on Interactive Systems in Healthcare (WISH) 2016*, 2016. 2. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos, and Barbara Grosz. Exploring Opportunities for Social Infrastructure in Congestive Heart Failure Management. In *Proceedings of the CSCW 2015 workshop on Moving Beyond e-Health and the Quantified Self*, 2015.

INVITED TALKS	*"Labs in the Wild": Teaching Signal Processing Using Wearables and Jupyter Notebooks in the Cloud* (Talk)	
	• SciPy Conference, Austin, TX	July 2016
	Wearable Signal Processing Using Docker Notebook Containers on AWS (Talk)	
	• JupyterDays Boston, Cambridge, MA	Mar 2016

TEACHING EXPERIENCE	**Course Support**	AY 2014-15, AY 2015-16, AY 2016-17
	ES 96 - Engineering Problem Solving and Design Project	
	Instructor: Varies by semester	
	School of Engineering and Applied Sciences, Harvard University	
	Course Support	AY 2014-15, AY 2015-16, AY 2016-17
	ES 100 - Engineering Design Projects	
	Instructor: Prof. Rob Wood	
	School of Engineering and Applied Sciences, Harvard University	
	Teaching Fellow	Spring 2016, Fall 2016
	ES 155 - Biological Signal Processing	
	Instructor: Prof. Demba Ba	
	School of Engineering and Applied Sciences, Harvard University	
	Course Support	AY 2014-15, AY 2015-16, AY 2016-17
	ES 52 - The Joy of Electronics - Part I	
	Instructor: David Abrams	
	School of Engineering and Applied Sciences, Harvard University	

Course Assistant Spring 2016
ES 151 - Applied Electromagnetism
Instructor: Mohamed Abouzahra, Ph.D. and Joseph Usoff, Ph.D.
School of Engineering and Applied Sciences, Harvard University

Teaching Fellow Spring 2013, Spring 2014
ES 50 - Introduction to Electrical Engineering
Instructor: Profs. Marko Loncar and Evelyn Hu
School of Engineering and Applied Sciences, Harvard University

Teaching Fellow Fall 2013
BE 110 - Physiological Systems Analysis
Instructor: Prof. Daniel Merfeld
School of Engineering and Applied Sciences, Harvard University

UNDERGRADUATE RESEARCH PROJECTS

1. *Robust Eye BlinkBased Selection Technique for Gaze-Based Interaction*
   Advisor: Prof. Krzysztof Gajos (Harvard SEAS)

2. *Mitigating the Effects of Interruptions and Task Switching using Blink-Based Interfaces*
   Advisor: Prof. Krzysztof Gajos (Harvard SEAS)

3. *Using EEG Noise as a Means for Adding Robustness to Eye Gaze Interfaces*
   Advisor: Prof. Krzysztof Gajos (Harvard SEAS)

4. *PCA-Based Face Detection using FOSCAM IP Camera and Facebook*
   Advisor: Prof. Jim Waldo (Harvard SEAS)

5. *LightningVolt: A bicycle-based mobile device charger*
   Advisor: Prof. Gu-Yeon Wei (Harvard SEAS)

REFERENCES

Krzysztof Z. Gajos
Professor
Intelligent Interactive Systems Group   E-mail: kgajos@seas.harvard.edu
Harvard University SEAS

Sunyoung Kim
Assistant Professor
School of Communication and Information   E-mail: sunyoungkim@rutgers.edu
Rutgers University

Anas Chalah
Executive Director of Active Learning
School of Engineering and Applied Sciences   E-mail: achalah@seas.harvard.edu
Harvard University

HARDWARE AND SOFTWARE SKILLS

Engineering Hardware:
Arduino, Raspberry Pi, BeagleBone, Neurosky MindWave, OpenEEG, Google Glass, Android, GazePoint EyeTracker, Empatica E4, EE Lab Stack (e.g. Oscilloscope, Function Generator)

Engineering Software:
SolidWorks, Matlab, Eagle, OpenCV, Open-Vibe, iPython/Jupyter

LANGUAGES

Computer Languages:
C, Matlab, LaTeX, HTML, CSS, PHP, JavaScript, Python (incl. NumPy, SciPy, SciKitLearn)

Human Languages:
English (Native), Persian (Native), Spanish (Previously Fluent)