

Yasha S. Iravantchi

CONTACT INFORMATION	Human-Computer Interaction Institute 5000 Forbes Ave. Pittsburgh, PA 15213	http://yasha.xyz ysi@cs.cmu.edu
RESEARCH INTERESTS	Human-Computer Interaction (HCI), Wearables, Ubiquitous Computing, Sensors, Health	
EDUCATION	Carnegie Mellon University , Pittsburgh, PA Ph.D. Student, Human-Computer Interaction Advisors: Chris Harrison, Mayank Goel Harvard College , Cambridge, MA S.B., Engineering Sciences (Tracks: Electrical Engineering/Biomedical Engineering)	August 2017 to present May 2014
PROFESSIONAL EXPERIENCE	Design Specialist in Electrical Engineering Active Learning Labs, Harvard University SEAS Cambridge, MA Product Design and Engineering Intern Design Catapult, Inc. Fountain Valley, CA	June 2014 to July 2017 Summers 2009-2012
PUBLICATIONS	<ol style="list-style-type: none">Sunyoung Kim, Yasha Iravantchi, Krzysztof Z. Gajos, and Barbara Grosz. SwellFit: a Wearable Sensor for Patients with Congestive Heart Failure. In <i>Proceedings of the Workshop on Interactive Systems in Healthcare (WISH) 2016</i>, 2016.Sunyoung Kim, Yasha Iravantchi, Krzysztof Z. Gajos, and Barbara Grosz. Exploring Opportunities for Social Infrastructure in Congestive Heart Failure Management. In <i>Proceedings of the CSCW 2015 workshop on Moving Beyond e-Health and the Quantified Self</i>, 2015.	
INVITED TALKS	<i>"Labs in the Wild": Teaching Signal Processing Using Wearables and Jupyter Notebooks in the Cloud</i> (Talk) <ul style="list-style-type: none">SciPy Conference, Austin, TX <i>Wearable Signal Processing Using Docker Notebook Containers on AWS</i> (Talk) <ul style="list-style-type: none">JupyterDays Boston, Cambridge, MA	July 2016 Mar 2016
TEACHING EXPERIENCE	Course Support ES 96 - Engineering Problem Solving and Design Project Instructor: Varies by semester School of Engineering and Applied Sciences, Harvard University Course Support ES 100 - Engineering Design Projects Instructor: Prof. Rob Wood School of Engineering and Applied Sciences, Harvard University Teaching Fellow ES 155 - Biological Signal Processing Instructor: Prof. Demba Ba School of Engineering and Applied Sciences, Harvard University Course Support ES 52 - The Joy of Electronics - Part I Instructor: David Abrams School of Engineering and Applied Sciences, Harvard University	AY 2014-15, AY 2015-16, AY 2016-17 AY 2014-15, AY 2015-16, AY 2016-17 Spring 2016, Fall 2016 AY 2014-15, AY 2015-16, AY 2016-17

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
PROJECTS1. *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 FOSSCAM 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

Chris Harrison

Professor

Future Interfaces Group

CMU Human-Computer Interaction Institute

E-mail: chris.harrison@cs.cmu.edu

Mayank Goel

Professor

SmaSH Lab

CMU Human-Computer Interaction Institute

E-mail: mayankgoel@cmu.edu

Krzysztof Z. Gajos

Professor

Intelligent Interactive Systems Group

Harvard University SEAS

E-mail: kgajos@seas.harvard.eduHARDWARE 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, L^AT_EX, HTML, CSS, PHP, JavaScript, Python (incl. NumPy, SciPy, SciKitLearn)

Human Languages:

English (Native), Persian (Native), Spanish (Previously Fluent)