Yasha S. Iravantchi

29 Oxford St. 562-546-3690 Contact Information Cambridge, MA 02138 yasha@seas.harvard.edu Research Fabrication, wearables, ubiquitous computing, signal processing, and biosignals. Interests EDUCATION Harvard University, Cambridge, MA S.B., Engineering Sciences (Tracks: Electrical Engineering/Biomedical Engineering), May 2014 Professional Design Specialist in Electrical Engineering June 2014 to present EXPERIENCE Active Learning Labs, Harvard University SEAS Cambridge, MA Product Design and Engineering Intern Summers 2009-2012 Design Catapult, Inc. Fountain Valley, CA Research Affiliate June 2013 to present Research EXPERIENCE 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. Presentations "Labs in the Wild": Teaching Signal Processing Using Wearables and Jupyter Notebooks AND TALKS in the Cloud • SciPy Conference, Austin, TX July 2016 How to Make Your Own Wearable (Workshop) • Harvard Active Learning Labs, Cambridge, MA July 2016 Wearable Signal Processing Using Docker Notebook Containers on AWS • JupyterDays Boston, Cambridge, MA Mar 2016 How to Measure Things (ES 100 Senior Capstone Workshop) • Harvard Active Learning Labs, Cambridge, MA Oct 2015 EE Zero-To-Sixty Workshop (Harvard J-TERM Workshop) • Harvard Active Learning Labs, Cambridge, MA Jan 2015 Data Measurement and Analysis (ES 100 Senior Capstone Lecture)

Oct 2014

• Harvard Active Learning Labs, Cambridge, MA

Teaching EXPERIENCE Teaching Fellow

Spring 2016

Spring 2016

ES 155 - Biological Signal Processing

Instructor: Prof. Demba Ba

School of Engineering and Applied Sciences, Harvard University

Course Assistant

ES 151 - Applied Electromagnetism

Instructor: Mohamed Abouzahra, Ph.D. and Joseph Usoff, Ph.D. School of Engineering and Applied Sciences, Harvard University

Teaching Fellow Springs 2013-14

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

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

4. 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

Demba Ba Professor

School of Engineering and Applied Sciences

E-mail: demba@seas.harvard.edu

Harvard University

HARDWARE AND

Engineering Hardware:

SOFTWARE SKILLS

Arduino, Raspberry Pi, BeagleBone, Neurosky MindWave, OpenEEG, Google Glass, Android, GazePoint EyeTracker, Empatica E4, EE Lab Stack

Engineering Software:

SolidWorks, MATLAB/Simulink, LabView, Eagle, OpenCV, Open-Vibe, iPython/Jupyter,

FabModules 1 4 1

LANGUAGES

Computer Languages:

C, MATLAB, LATEX, HTML, CSS, PHP, JavaScript, Python

Human Languages:

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