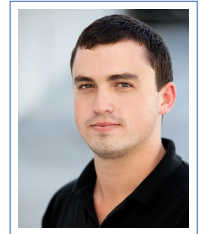


Alexander Fiannaca

UNIVERSITY OF WASHINGTON, COMPUTER SCI & ENGR

Alex Fiannaca
Comp Sci, Box 352350
Seattle, WA 98195-2350
(775) 527 0738
fiannaca@cs.uw.edu
www.alifeincode.com



Education

- In Progress **Ph.D. in Computer Science and Engineering**
University of Washington, Human Centered Robotics Lab & Mobile Accessibility Lab.
- 2016 **M.S. in Computer Science and Engineering**
University of Washington, Mobile Accessibility Lab, 3.82 GPA.
- 2014 **M.S. in Computer Science and Engineering**
University of Nevada, Reno, Human Computer Interaction Lab, 4.0 GPA.
- 2012 **B.S. in Biochemistry and Molecular Biology, Magna Cum Laude**
University of Nevada, Reno, 3.79 GPA (Honors Program).

Technical Work Experience

- Summer 2016 **Research Intern**
Microsoft Research
Returning to the Microsoft NExT Enable Team, I researched methods for improving the expressivity and emotional range of synthetic speech output from AAC devices.
- Summer 2015 **Research Intern**
Microsoft Research
As a member of the Microsoft NExT Enable Team, I researched approaches for shifting communication burden off of AAC users by designing AAC systems that engage all interlocutors.
- 2012–2014 **Research Assistant**, University of Nevada, Reno
Department of Computer Science and Engineering
Member of the Human-Computer Interaction Lab under the direction of Eelke Folmer, Ph.D.
- 2011–2012 **Web Developer**, University of Nevada, Reno
Asphalt Research Consortium
Developed site functionality for the ARC Database web portal, a website which allows researchers from the ARC member institutions to manage and access large asphalt research data sets.

Technical Skills & Projects as Lead Developer

- Current **Voicesetting:** Leveraging Modern TTS Technologies to Improve AAC Expressivity
Microsoft Research
Skills: C#/XAML
- Current **Audio Alt Tags:** Making Visual Web Content Accessible
University of Washington
Skills: HTML 5, CSS, Javascript, PHP
- 2016 **KubiLingo:** Leveraging DuoLingo Content in an Android-Based Robot to Teach Children Language
University of Washington
Skills: HTML 5, CSS, Javascript (Chrome Extensions), Java/Android
Sample: More information available at alifeincode.com/#projects-portfolio.

- 2015 **AACrobat:** Lowering Communication Barriers for Gaze-Based AAC
Microsoft Research, University of Washington
Skills: HTML 5, CSS, Javascript, Ionic/Cordova, C#/XAML
Sample: More information available at alifeincode.com/#projects-portfolio.
- 2014 **Headlock:** a Wearable Navigation Aid that Helps Blind Cane Users Traverse Large Open Spaces
University of Nevada, www.eelke.com/headlock-glass-navigation.html
Skills: Java, Android, Google Glass, User Study Design
Sample: Available Upon Request - Not yet open source.
- 2013 **Haptic Target Acquisition:** Enabling Spatial Gestures in Nonvisual Displays
University of Nevada, www.eelke.com/spatial-gestures-proprioceptivedisplay.html
Skills: C#, Sony Move, Windows Forms, User Study Design
Sample: github.com/fiannaca/ViAppleGrab.

Highly Proficient

Moderately Knowledgeable



C# | JS | Py



Java



WPF



L^AT_EX



C++



STL

Publications

Halim Cagri Ates, Alexander Fiannaca, and Eelke Folmer. Immersive simulation of visual impairments using a wearable see-through display. In *TEI '15*, pages 225–228. ACM, 2015.

Alexander Fiannaca, Ilias Apostolopoulos, and Eelke Folmer. Headlock: a wearable navigation aid that helps blind cane users traverse large open spaces. In *ASSETS '14*, pages 323–324. ACM, 2014.

Alexander Fiannaca, Tony Morelli, and Eelke Folmer. Haptic Target Acquisition to Enable Spatial Gestures in Nonvisual Displays. In *Graphics Interface*, pages 213–219, 2013.

Alexander Fiannaca, Mira Shah, Ann Paradiso, and Meredith Ringel Morris. AACrobat: Using Mobile Devices to Lower Communication Barriers and Provide Autonomy with Gaze-Based AAC, In Submission. 2016.

Leah Perlmutter, Alexander Fiannaca, Eric Kernfeld, Sahil Anand, Lindsey Arnold, and Maya Cakmak. Automatic Adaptation of Online Language Lessons for Robot Tutoring, To Appear *ICSR 2016*. 2015.

Teaching Experience

Wi 2015, **CSE 440:** Introduction to HCI

Sp 2016 *TA under Professors Jame Fogarty and Katharina Reinecke*

Skills: Design Cycle, Prototyping, Ideation, User Research

Relevant Coursework

Compiler Construction

Computability & Formal Languages

Principles of Database Management Systems

Systems (Networks, OpSys, Distributed)

Analysis of Algorithms

Machine Learning

Natural Language Processing

Human Computer Interaction

References (Research Advisors)

Maya Cakmak, Ph.D.

mcakmak@cs.uw.edu

www.mayacakmak.com

Richard Ladner, Ph.D.

ladner@cs.uw.edu

www.cs.uw.edu/people/faculty/ladner

Eelke Folmer, Ph.D.

efolmer@unr.edu

www.eelke.com