

EDUCATION

Seattle, WA

University of Washington

Graduation: June 2016

- Bachelors of Science in Computer Engineering with Honors
- Bachelors of Science in Bioengineering with Honors
- *Related Coursework*: Honors Introductory Programming I & II, Data Structures and Algorithms, Foundations of Computing I, Web Programming, Hardware/Software Interface, Sensors and Signals

RELEVANT EMPLOYMENT

Visiting Research Intern

Microsoft Research

Summer 2014

- Developed an Android application that used the JavaMail API and an SMTP server to send audio messages from the device to a central server. The app also displayed an RSS feed to view messages.
- The app was designed for use in rural areas by citizen journalists to record and listen to audio news.
- Trained a group of journalists to use the app which is currently being used throughout India.

PROJECTS

- **ODK Diagnostics (2014–Present)**: Developer of an Android application that uses computer vision algorithms to process images of diagnostic tests and deliver a meaningful diagnosis; built using Java Native Interface (JNI) and OpenCV.
- **HandWave (2013)**: Developer of an Android library that allows developers to add touch-free capabilities to applications on mobile devices. Was featured on the front page of Hacker News.
- **Prosthetic FSR Device (2012–2013)**: Developer of software and hardware for wearable devices to ameliorate prosthetic socket fit. Devices are currently used by researchers.

LANGUAGES AND TECHNOLOGIES

- *Proficient*: Java, HTML, CSS, PHP, Python, JavaScript, Unix/Linux, SQL
- *Familiar*: C, C++, LabVIEW, SolidWorks, COMSOL
- Android development, Eclipse, Android Studio, Git, Junit, OpenCV, Visual Studio, SQLite

ADDITIONAL EXPERIENCE

- **TA for Introductory Python Course (2014)**: Taught a section of 20 students, graded homework assignments, and conducted weekly office hours to aid students with programming questions.

SELECTED PUBLICATIONS

1. Dell N, **D'Silva K**, Borriello G. Mobile Touch-Free Interaction for Global Health. ACM Workshop on Mobile Computing Systems and Applications (*HotMobile '15*). To appear.
2. **D'Silva K**, Marathe M, Vashistha A, Borriello G, Thies B. A Mobile Application for Interactive Voice Forums: Design and Pilot Deployment in Rural India. Poster in *ACM DEV 2014*
3. **D'Silva K**, Hafner BJ, Allyn KJ, Sanders JE. Self-reported prosthetic sock use among persons with transtibial amputation. *Prosthet Orthot Intl* 38(4):321-31, 2014.

AWARDS AND HONORS

- Undergraduate Research Program, Levinson Scholarship
- University of Washington Presidential Scholarship
- Emerging Leaders in Engineering Program, Priscilla and Melvin Wilson Endowed Scholarship
- American Academy of Orthotists & Prosthetists Northwest Chapter, Student Researcher Award
- Mary Gates Research Scholarship