
EDUCATION

University of Cambridge**September 2016 - Present**

- PhD in Computer Science and Engineering
- Research: Building Machine Learning Models of Urban Human Mobility

University of Washington (UW), Seattle**August 2011 - June 2016**

- Bachelors of Science in Computer Engineering with Honors
- Bachelors of Science in Bioengineering with Honors

INDUSTRY EXPERIENCE

Google Inc.**Summer 2016**

- Member of the Rendering Engine for Chrome developing features for the default media player

Google Inc.**Summer 2015**

- Member of the Streams, Photos, and Sharing Team developing Android animations

Microsoft Research**Summer 2014**

- Developed an Android application for citizen journalists in rural India to record and listen to news
- Trained a group of journalists to use the app which is currently being used throughout India

RESEARCH EXPERIENCE

Cambridge, Department of Computer Science**September 2016 - Present**

- Exploring the application of location-based social network data in urban environments through multi-layer spatio-temporal models, e.g. human mobility patterns and urban spatial structure analyses

UW, Molecular Information Systems Lab**September 2015 - June 2016**

- Examined ways in which DNA molecules can be used for long-term data storage
- Created error analysis models to analyze patterns in sequencing errors

UW, Department of Computer Science**June 2013 - June 2015**

- Developed an Android application that automatically read and processed MRSA tests to deliver a meaningful diagnosis to patients at the point of care, within a single clinic visit

UW, Department of Bioengineering**September 2011 - January 2013**

- Developed software & hardware for devices to ameliorate socket fit using Force Sensitive Resistors
- Analyzed changes in prosthetic sock thickness with use

LANGUAGES AND TECHNOLOGIES

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

SELECTED MEDIA PUBLICATIONS

- Undergraduate Academic Affairs. "UW student and alumna named Gates Cambridge Scholar": An overview of my undergraduate research and graduate fellowship. ([URL](#))

RESEARCH PUBLICATIONS

1. **D'Silva K**, Noulas A, Musolesi M, Mascolo C, Sklar M. "If I build it, will they come? Predicting new venue visitation patterns through mobility data". SIGSPATIAL'17. Redondo Beach, CA. November 2017.
2. Dell N, **D'Silva K**, Borriello G. "Mobile Touch-Free Interaction for Global Health". ACM Workshop on Mobile Computing Systems and Applications (HotMobile). Santa Fe, NM. February 2015.
3. Cagle J, **D'Silva K**, Hafner BJ, Harrison D, Sanders JE. "Amputee socks: Sock thickness changes with normal use". Prosthetics and Orthotics International. December 2014.
4. **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) ACM DEV 2014. San Jose, CA. December 2014.
5. **D'Silva K**, Hafner BJ, Allyn KJ, Sanders JE. "Self-reported prosthetic sock use among persons with transtibial amputation". Prosthetics and Orthotics International. July 2013.
6. **D'Silva K**, Cagle J, Sanders J. "Quantifying Variations in Prosthetic Sock Thickness over Time". American Academy of Orthotists & Prosthetists Annual Meeting and Scientific Symposium. Orlando, FL. February 2013.

AWARDS AND HONORS

- **Gates Cambridge Scholarship (2016):** Competitive award annually funds 85 students worldwide to study at the University of Cambridge. Scholars are committed to improving the lives of others.
- **CRA Outstanding Undergraduate Researcher Finalist (2015):** The Computer Research Associating recognizes undergraduate students who show outstanding research potential in an area of computing research.
- **Duke of Edinburgh's Gold Award (2015):** Awarded to candidates who meet the requirements and criteria for Service, Skills, Physical Recreation and Adventurous Journeys. I received the Silver award in 2011.
- **Mary Gates Research Scholarship (2015 & 2012):** Competitive scholarships intended to enhance the educational experiences of undergraduate students at the UW while they are engaged in research guided by faculty.
- **Society of Women Engineers Outstanding Female Departmental Award (2015):** Award given to a UW female who has conducted and published extensive research in her field, has demonstrated the initiative to delve into new technology, and has been a leader within the department.
- **UW Dean's List (2011 - 2015):** Awarded to undergraduates who have attained a quarterly GPA of 3.50 or higher in at least 12 graded credits.
- **Undergraduate Research Program, Levinson Scholarship (2014):** Scholarship awarded to talented and highly motivated UW juniors and seniors who want to pursue creative and advanced bioscience research.
- **University of Washington Presidential Scholarship (2014):** Intended to support students who have clearly demonstrated scholastic achievement, an interest in research, and graduate degree goals.