
EDUCATION

University of Cambridge**September 2016 - Present**

- PhD in Computer Science and Engineering
- 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

United Nations Development Programme, Jakarta**Summer 2018**

- Worked at the Global Pulse Lab, an innovation lab which harnesses data science insights for policy.
- Modelled the impact of natural disasters to support future disaster relief efforts.

Google, London**Summer 2016**

- Member of the Rendering Engine for Google Chrome developing features for the default media player.
- Built features, including a download and overflow button, which are implemented in Chrome today.

Google, Mountain View**Summer 2015**

- Developed animations for the infrastructure underpinning many of Google's Android applications.
- Built a library for other developers to incorporate the animations into their mobile applications.

Microsoft Research, Bangalore**Summer 2014**

- My team built technologies to address the needs of people in the world's developing communities.
- Developed an Android application for citizen journalists in rural India to record and listen to news.
- Trained a group of journalists to use the application which is currently being used throughout India.

Broad Institute of Harvard and MIT, Boston**Summer 2012**

- Developed annotations for a database to hold data about chemicals and their biological properties.

RESEARCH EXPERIENCE

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 - June 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: Python, Unix/Linux, JavaScript, Java, HTML, CSS, PHP, SQL, 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

- Apolitical. “Forget AI or blockchain: it’s data science policymakers can’t afford to ignore”: An op-ed about the future of data science. ([URL](#))
- Department of Bioengineering. “Krittika D’Silva Receives Gates Cambridge Scholarship”: An overview of my undergraduate research and graduate fellowship. ([URL](#))
- National Geographic. “In Jungles of India, New Phone App Helps Indigenous Tribes Embroiled in Maoist Insurgency”: An description of my work with CGNet Swara. ([URL](#))

AWARDS AND HONORS

- **Computer Laboratory Wiseman Award (2018)**: Given to students who make a commendable contribution to the Department by organizing outreach events or teaching undergraduate students.
- **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.
- **Rhodes Finalist (2016)**: The Rhodes trust seeks students of outstanding intellect, character, leadership, and commitment to service.
- **Outstanding Senior Award in Computer Engineering (2016)**: Prestigious departmental award given to one member of the Computer Engineering graduating class.
- **CRA Outstanding Undergraduate Researcher Finalist (2015)**: The Computer Research Association recognizes undergraduate students who show outstanding potential in 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.
- **Mary Gates Research Scholarship (2015 & 2012)**: Competitive scholarships intended to enhance the educational experiences of undergraduate students engaged in research.
- **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.
- **University of Washington Presidential Scholarship (2014)**: Intended to support students who have demonstrated scholastic achievement, an interest in research, and graduate degree goals.

RESEARCH PUBLICATIONS

1. **D’Silva K**, Jayarajah K, Noulas T, Mascolo C, Misra A. “The Role of Urban Mobility in Retail Business Survival”. IMWUT Ubicomp 2018. Singapore. October 2018.
2. **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.
3. 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.
4. 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.
5. **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.
6. **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.
7. **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.