

# Farica Zhuang

Email: [farica@seas.upenn.edu](mailto:farica@seas.upenn.edu) Website: <https://fariczjj.github.io/>

---

## EDUCATION

### University of Pennsylvania

*Doctor of Philosophy in Computer Science*

Expected graduation: May 2025

Philadelphia, Pennsylvania

### Duke University

*Master of Science in Computer Science, Outstanding Teaching Assistant Award*

May 2020

Durham, North Carolina

### University of California, San Diego

*Bachelor of Science in Applied Mathematics, Minor in Computer Science*

June 2018

La Jolla, CA

### Foothill College/De Anza College

*Associate in Science for Transfer in Mathematics with High Honors, Honors Scholar, Outstanding Student Award*

June 2016

Los Altos Hills, CA

---

## SKILLS

**Programming:** Python, Java, C++, C, R, MATLAB, SQL, bash

**Tools:** JUnit, Git, LaTeX, LINUX/UNIX, Docker, Kubernetes, Minikube, Kubectrl, Helm, Redis, Celery, Flower, Jira, Zypper

**Languages:** English (Native), Indonesian (Native), Mandarin (Fluent), Malay (Fluent), Hokkien/Taiwanese (Conversational)

---

## WORK EXPERIENCE

### Eureka by SAP S/4HANA

Newport Beach, CA

*Software Engineer*

- Full stack developer for Intelligent Trade Claims Management system, working with security validation, implementing new features, and writing tests

### Duke University

Durham, NC

*Graduate Research Assistant*

January 2019 - May 2020

- Gave a talk at National Big Data Health Science Conference 2020, presented a poster at RECOMB New York Conference 2019
- Investigating and building machine learning models to predict how transcription factors affect each other's binding on DNA
- Developed models to predict 1-year and 30-day mortality and readmission among hip fracture patients
- Developed models to predict pathogenicity of RYR2 and KCNQ1 genes variants of unknown significance

*Graduate Teaching Assistant for CS101*

January 2019 - May 2020

- Develop auto graders using Python unittest for assignments
- Substitute lecture, grade, hold office hours, answer questions on online forum for a class of 270 students
- Manage 30 undergraduate teaching assistants

### Teradata

San Diego, CA

*Software Engineering Summer Intern (Operating System Automation Team)*

- Containerized a metadata driven application CI/CD (continuous integration & continuous deployment) infrastructure submodule for Teradata's distributed python application using Docker, Kubernetes, Celery, and Redis

---

## PROJECTS

**Python tutorial:** Developed scripts and recorded a series of 25 python tutorial videos published to Duke Nursing School students who are interested in learning to code in python for machine learning and data analysis

**Fairness and privacy:** Privacy and fairness project exploring how sexism, racism, and other prejudices in word embeddings impact classifiers that then affect policy decisions downstream e.g. Twitter hate speech detection, gender bias in Google translate

**Android app:** WhereTo (Awarded Beginner Hacker Champion at HackXX)

- Developed an app that provides a platform for UCSD students to have an easier time buying or selling a ride
- Worked on retrieving and storing user information on Firebase and planned the flow of the design

**Dragonboard 410c:** Lit Dash

- Built a hardware device that installs on your car's dashboard, and uses LEDs to provide visual navigation aids in addition to your Google Maps navigation system to ensure a less distracted driving experience, reduce frustration, and help those with hearing impairments
- Worked on the Python script that retrieves information from the navigation system API and control the LEDs through the Dragonboard

---

## EXTRACURRICULAR ACTIVITIES

### Duke University

Durham, NC

*Association for Computing Machinery - Women in Computing (ACM-W) President*

July 2019 - May 2020

- Kickstarting a mentorship program and plan social events to help foster a supportive community of over 50 women
- Organizing mock interviews and inter-organization negotiation webinar to encourage professional development among students

*Indo@Duke Vice President and Co-Founder*

July 2019 - May 2020

- Plan social events to help foster a supportive community among 30 Indonesian students and working professionals in Durham

*Computer Science Department Representative in Student Council*

July 2019 - May 2020

- Cater to the voices of over 70 students in the Master's program regarding ongoing issues on campus
- Attend biweekly meeting with over 200 other representatives from all over campus to discuss issues

*Duke Food Pantry Volunteer*

July 2019 - May 2020

- Help with food packing and distribution to help fight food insecurity on campus