Elizabeth Louie

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EDUCATION

CARNEGIE MELLON UNIVERSITY

BS in Computer Science
May 2023 | Pittsburgh, PA
School of Computer Science
SCS Dean's List 2/2 semesters
GPA: 3.89 / 4.0

THOMAS JEFFERSON HIGH SCHOOL FOR SCIENCE AND TECHNOLOGY

Grad. June 2019 | Alexandria, VA
GPA: 4.5

LINKS

Website: **elizabethlouie.com**
Github:// **elouiestudent**
LinkedIn:// **elizabethlouie**

COURSEWORK

UNDERGRADUATE

Great Theoretical Ideas in Computer Science
Principles of Functional Programming
Principles of Imperative Computation
Mathematical Foundations in CS
Matrices and Linear Transformations
Calculus in Three Dimensions

HIGH SCHOOL

Artificial Intelligence I & II
Parallel Programming I & II
Mobile/Web Development
Functional Programming

SKILLS

PROGRAMMING

Proficient:
C • Java • Python • Dart • Flutter
SML • Android • Git • LaTeX
Familiar:
React • Javascript • HTML • CSS • iOS • MySQL

TOOLS

Git • Android Studio • VSCode • Vim • Microsoft Office

ACTIVITIES

CMU Academic Development Peer Tutor
CMU Club Swimming

EXPERIENCE

MOBILE COMMERCE LAB | Research Intern

May 2020 - Present | Pittsburgh, PA
- Architected, designed, and developed **notifications** for the cross-platform **IoT Assistant App (IoTA)** using **background location tracking** and **geofences** with **Flutter** under **Prof. Norman Sadeh**
- Working with **Aerin Zhang** to modify the notifications for an in-situ study

HUMAN-COMPUTER INTERACTION INSTITUTE | Research Intern

Jan. 2020 – May 2020 | Pittsburgh, PA
- Worked with **Tianshi Li** to collect data from r/AndroidDev through building machine learning models with the **Snorkel API** to identify privacy/security-related discussion and conduct qualitative/quantitative analysis on the data
- Work featured in paper accepted to CSCW 2020

CISCO | Extern

Jun. 2018 – Jul. 2018 | Washington D.C.
- Collaborated in team of 3 to create solution for transportation problems through proposal to use **machine learning** and reroute bus routes to ease traffic congestion and presented it to a senior VP in Cisco
- Conceptualized a **rewards system** in an app that gives redeemable points when user takes public transportation or back roads

PROJECTS

SENIOR RESEARCH PROJECT

Aug. 2018 – May 2019 | Alexandria, VA
Developed an **Android** application for users with motor disabilities that uses the camera to **read head and eye movements** to manipulate a cursor on the screen and control the phone.

HACKTJ

Apr. 2019 | Alexandria, VA
Built a **website** that employed **Twitter API** to track tweets about a specific topic using **natural language processing** and **real-time location tracking** to find out how people's ideas congregate based on geographical location.

HOOHACKS

Mar. 2019 | Charlottesville, VA
Collaborated in a team of 4 to build **VR** application to teach children how a bill becomes a law and implemented **website** to test users with quiz after simulation and evaluate frequency of wrong answers using real-time histogram. Won **Best Art/Gaming Hack** out of 200 teams.

HACKUVA

Mar. 2018 | Charlottesville, VA
Created **iOS application** using **Swift** that reads left and right eye winks and smiles in order to call for different emergency services using the SafeTrek API. Won second in **Best Use of SafeTrek API** out of 200 teams.

PUBLICATIONS

[1] T. Li, E. Louie, L. Dabbish, and J. I. Hong. How developers talk about personal data and what it means for user privacy: A case study of a developer forum on reddit. *CSCW 2020*, accepted.