# **Elizabeth Louie**

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# **Education**

# **Carnegie Mellon University**

May 2023

Bachelor of Science in Computer Science, GPA: 3.89

Pittsburgh, PA

#### **Relevant Coursework**

Parallel and Sequential Data Structures and Algorithms\*

Probability Theory for Computer Scientists\*

Artificial Intelligence: Representation and Problem Solving\*

Great Theoretical Ideas in Computer Science

**Principles of Functional Programming** 

**Principles of Imperative Computation** 

Mathematical Foundations in Computer Science

Matrices and Linear Transformations

Calculus in Three Dimensions

# **Work Experience**

# **Mobile Commerce Lab**

May 2020 - Present

Research Intern

Pittsburgh, PA

 Architected, designed, and implemented notifications for the <u>IoT Assistant App</u> using background location tracking and geofences with Flutter

# **Human-Computer Interaction Institute**

Jan 2020 - May 2020

Research Intern

Pittsburgh, PA

- Interpreted data from r/AndroidDev through building machine learning models with the Snorkel API to identify privacy/security-related discussion and conduct qualitative/quantitative analysis
- Second author of paper accepted to CSCW 2020: How Developers Talk About Personal Data and What it Means for User Privacy: A Case Study of a Developer Forum on Reddit

**Cisco** Jun 2018 – Jul 2018

Extern

Washington D.C.

• Presented proposal in team of 3 to solve transportation problems using machine learning to reroute bus routes and ease traffic congestion to a senior VP in Cisco

# **Projects**

#### Senior Research Project (Java, Android SDK)

Aug 2018 - May 2019

Developed an Android application for users with motor disabilities that uses the front camera to read head and eye
movements to manipulate a cursor on the screen and control the phone.

### HackTJ – MovementTracker (Twitter API, Javascript, HTML, CSS)

Apr 2019

 Built a <u>website</u> to track tweets surrounding a topic using natural language processing to examine how people's ideas congregate based on geographical location.

# HooHacks – The Ultimate Just A Bill Experience (VR, Javascript, HTML, CSS)

Mar 2019

- Lead a team of 4 to build VR application to teach children how a bill becomes a law and implemented <u>website</u> to quiz users after simulation and evaluate frequency of wrong answers using real-time histograms.
- Won Best Art/Gaming Hack out of ~200 teams.

### **HackUVA – EyeAlert** (Swift, SafeTrek API)

Mar 2018

- Collaborated in team of 4 to create an iOS app that reads eye winks and smiles to call for different emergency services.
- Won second in **Best Use of SafeTrek API** out of ~200 teams

### Skills

# **Programming Languages**

Java, Python, C, SML, Dart, Javascript, HTML, CSS

# Frameworks & Technologies

Flutter, React, Android SDK, Git, VSCode, Android Studio, Vim, Microsoft Office

#### **Activities**