# **JEFFREY MURRAY JR**

Bothell, WA • jeffmur@uw.edu • (425) 698-0245 • github.com/jeffmur • linkedin.com/in/jeffmurjr

#### **TECHNICAL SKILLS**

Languages: Clojure, Python, Dart, C#, C++, Java, JavaScript Tools: Amazon Web Services, GitHub, Docker, Kubernetes Focus: Networking, Privacy, Security, Internet of Things

#### **EDUCATION**

Master of Science Cybersecurity Engineering University of Washington | GPA 3.83

Bachelor of Science Computer Science and Software Engineering University of Washington | GPA 3.56

#### **PROFESSIONAL EXPERIENCE**

### **Software Developer**

SAP Concur – Bellevue, WA

- Spearheaded a distributed load testing platform with Locust to evaluate the reliability of production services.
- Involved in creating a robust API for daily searches across millions of documents from thousands of callers.
- Pioneered GitHub workflows to automate and validate documentation against OpenAPI specifications.

#### **Research Assistant**

University of Washington – Bothell, WA

- Privacy Analysis of Data Anonymization of Customer Proprietary Network Information. •
- Investigation of a large body of literature in privacy preserving data anonymization techniques. •
- Delivered two workshop presentations and a whitepaper for telecommunications partner.

#### **Software Developer Internship**

Apollo Video Technology – Bothell, WA

- Developed a Flutter mobile application from scratch to decode live video streams.
- Utilized WebView plugin to render decoded live video stream in HTML via JS. •
- Layered Architecture for user interface handled asynchronous network calls in Dart. •
- Collaboration with three team members to design and QA test application. •

## **TECHNICAL PROJECTS**

# **Smart Mirror with Facial Recognition**

Internet of Things, Machine Learning

- Provides authenticated users a unique, configurable content view upon request.
- Extended Magic Mirror platform in Node.js as a user interface on Raspberry Pi 4.
- Integrated Google Assistant for voice control and configurable wake word with Porcupine.
- Use of CUDA powered facial recognition in Python on Jetson Nano. •
- Created RESTful API on Google Cloud Services to facilitate event-driven communication.

# **Privacy-Preserving Framework**

Data Science, Machine Learning

- Anonymizes mobility traces contained in large datasets for data publication.
- Designed a standalone, plug-and-play framework to integrate new models and datasets.
- Integrated four datasets and two deep learning models to benchmark the system.
- Collaborated with one other team member to design API and configure docker container. •
- Translates random noise into rich mobility traces from the population's attributes. •

Jul 2020 – Sep 2020

Oct 2019 - Feb 2020

Sep 2021 – Dec 2021

Sep 2020 – Aug 2021

Expected 2024

2020

Jan 2022 - Present