



# JEFFREY MURRAY JR

 jeffmur@uw.edu

 (425) 698-0245

 Kirkland, WA

 [in/jeffmurrayjr](https://www.linkedin.com/in/jeffmurrayjr)

 [git/jeffmurrayjr](https://github.com/jeffmurrayjr)

 [jeffmurray.dev](https://jeffmurray.dev)

## EDUCATION

---

<b>MS</b>	University of Washington, Cybersecurity Engineering	Bothell, WA <i>Anticipated Graduation June 2022</i>
<b>BS</b>	University of Washington, Computer Science and Software Engineering	Bothell, WA <i>Sep 2018 - Aug 2020</i>

## EXPERIENCE

---

<b>Research Assistant</b> <i>Privacy Analysis of Data Anonymization</i>	Bothell, WA <i>Jul 2020 – Sep 2020</i>
<ul style="list-style-type: none"><li>Investigation of a large body of literature in state-of-the-art anonymization techniques.</li><li>Analysis and recommendations for Customer Propriety Network Information.</li><li>Publication available on <a href="https://arxiv.org/abs/2101.09834">arXiv:2101.09834</a>.</li></ul>	
<b>Web Developer</b> [JavaScript] <i>Briley's BBQ, Front-End</i>	Lake City, WA <i>Dec 2019 – Feb 2020</i>
<ul style="list-style-type: none"><li>Developed a prototype on my own time and sparked their interest in a new website.</li><li>Transferred existing DNS records and web service from Wix to Squarespace.</li><li>Integrated third party gift card and open-source file uploading system.</li></ul>	
<b>Internship</b> [Dart, Python, JavaScript] <i>Luminator Technology Group, Full-Stack</i>	Bothell, WA <i>Oct 2019 – Feb 2020</i>
<ul style="list-style-type: none"><li>Migration of their mSET web service to a mobile application.</li><li>Use of their open API and Flutter plugins to decode H.264/5 encoded data stream.</li><li>Collaborate with three other team members and project manager.</li></ul>	

## RESEARCH/PROJECTS

---

<b>User Communities with Machine Learning</b> [Python] <i>Research Project, Data Science</i>	Bothell, WA <i>Sep 2020 – Present</i>
<ul style="list-style-type: none"><li>Analysis of participating user GPS data collected over the duration of five years.</li><li>Pre-processing trajectories to heatmaps with respect to latitude and longitude time series.</li><li>Used as an input to cluster user communities based on human mobility patterns.</li></ul>	
<b>Attack Framework</b> [Java, Kotlin, MySQL] <i>Research Project, Full-Stack</i>	Bothell, WA <i>Mar 2020 – Aug 2020</i>
<ul style="list-style-type: none"><li>Extension of the AWARE Framework which allow users control of data collection.</li><li>Setup micro-service hosted on AWS as LAMP server and implementation of P2P messaging.</li><li>Collaboration with one other team member to plan, design, and develop a flexible adversarial framework.</li></ul>	
<b>Checkers on Unity</b> [C++, C#] <i>Game Development, Full-Stack</i>	Bothell, WA <i>Jan 2020 – Mar 2020</i>
<ul style="list-style-type: none"><li>American style checkers that allows users to play either locally or online.</li><li>Client-Server architecture which matchmakes pairs of users by a first-come, first-served basis.</li><li>Collaboration with two other team members to plan, design, and implement our multiplayer game.</li></ul>	

## ADDITIONAL SKILLS

---

**Languages:** Python, C++, C#, Dart, Java, Kotlin, JavaScript

**Platforms:** Linux, Windows, Unity, iOS, Android

**Interests:** Ethical Hacking, Machine Learning, Networking, IoT

**Hobbies:** Ice Hockey, Hack the Box, Coding Challenges, Hiking, Gaming, Puppy Training