Work Experience University of Maryland - PLUM Aug 2022 - Present Graduate Research Assistant Working with Leonidas Lampropoulos on the intersection of Property Based Testing, Fuzzing, a nd Formal Verification. Amazon Web Services Privacy Engineering Team - Automated Reasoning May 2022 - Aug 2022 Applied Science Intern Implemented of a novel encryption scheme on top of the AWS Encryption SDK. Python, Dafny, AWS Encryption SDK University of Maryland - Maryland Cybersecurity Center(MC2) Jul 2020 - Dec 2020 Research Intern Program Synthesis, Automatic Exploit Generation Havelsan Jul 2020 - Apr 2020 Part-Time Engineer Designed and implemented a novel bandwidth detection and optimization algorithm for a video -conference application. Javascript, React Emproof Jun 2019 - Sep 2019 Embedded Security Engineering Intern Worked on translation validation of binary obfuscation techniques. C++, Z3 SMT Solver, ARM Assembly, Symbolic Execution