niki.carroll@gmail.com (703)789-3844

SUMMARY

A passionate and curious Computer Science student with strong problem solving skills.

Experience working in professional software development environments and communicating with teams, keen to develop a greater depth of knowledge and experience in the security field, particularly with low level systems and program analysis.

EXPERIENCE Software/Research Engineer Intern & Part-time Engineer Summer & Fall 2019 Galois

- Developed a domain-specific language for translating and invoking queries on a code property graph database for a program analysis tool.
- Developed novel ways to expose and test for hardware and software vulnerabilities for RISC-V systems.
- Developed canonical vulnerability examples for testing and development of program analysis tools.

Software Development Engineer

Summer 2016, 2017 & 2018

Amazon Web Services

- Designed, researched and implemented automation tools to assist multiple teams under AWS Security.
- Designed and developed internal improvements for AWS Artifact using OCR and AWS Lambda.
- Developed tooling around metrics monitoring and consolidation for security engineers.
- Improved and automated discovery, querying and reporting of permissions and access across systems for threat intelligence and security operations team using graph databases.
- Worked on both greenfield and established codebases.

SKILLS

Languages: Java, C, Python, SPARQL

Technologies: Linux, AWS (Lambda, Cloudformation), Software Design, Graph Databases, Unit Testing

Misc: Fast learner, strong communication across different teams, capable of reading technical documentation, worked on open source codebases.

EDUCATION

Bachelor of Science, Computer Science

George Mason University Currently Enrolled

EXTRA-

Member, Mason Competitive Cyber

CURRICULAR Roller Derby, various leagues

ACTIVITIES Capoeira