>JACOB ROBIE

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SUMMARY

Secret cleared Senior at George Mason University and Co-op in Mission Focused Tools of the Cyber Innovations Unit at Battelle Memorial Institute.

SKILLS

Programming Languages & Tools Experience

- · Python, Java, C/C++, Android, C#, CUDA
- · PostgreSQL, SQLite, RabbitMQ, Celery, Airflow, Scrapy, Git

Reverse Engineering

- · Disassembly and reverse engineering of Android applications
- · Understanding of Android internals and Security Model
- · Principal understanding of GSM networks, experience with software based GSM base stations
- · Experience with network sniffing using Wireshark
- · Some experience with x86, ARM, and MIPS assembly language, IDA Pro

Other Areas of Interest

- · Capture The Flag Competitions Mason Competitive Cyber
- · Software Defined Radio experience with both Ettus and DRT devices
- · Robotics GMU Robotics Club

EXPERIENCE

August 2016 -Present

Co-op - Mission Focused Tools, Battelle Memorial Institute

- Designed, implemented, and maintain a system for programmatically collecting cataloguing, and emulating SOHO device firmware
- · Bug fixes and feature development on an automated PSP testing framework
- · Symbolic & Concolic Execution research using Angr and Z3

March 2014 -August 2015

Cyber Systems Specialist, Métier Defense Solutions

· Responsibilities included Android development and reverse engineering, SDR configuration and prototyping, and assisting in development of RFP responses

2011 & 2012

Computer Security Intern, National Institute of Standards and Technology

 Partnered with George Mason's Computer Science Department to create static analysis tools for identifying malicious Windows Phone applications

EDUCATION

2015-Present

George Mason University

- · Pursuing Bachelor of Computer Science in Volgenau School of Engineering.
- · Expected Graduation: Fall 2017

2012-2015

Northern Virginia Community College