

WORK EXPERIENCE

Software Engineer I **Verisign, Inc.** **February 27, 2017 – Present**
Reston, VA

Consolidated Top-Level Domain, DotGov Infrastructure Services

- Programming registrar domain provisioning systems and architecture for full software life cycles.
- Reducing security risks with provisioning services by creating and integrating vulnerability detection tools.
- Analyzing ICANN requirements to provide reliable, secure, and available provisioning services to registrars.

Software Engineer Associate **Lockheed Martin** **June 6, 2016 – February 3, 2017**
Manassas, VA

Acoustic Rapid COTS Insertion System Services

- Designed and implemented event-driven API in Java permitting engineering to develop sonar system manager tools with cluster management and scheduling software.
- Prototyped modern data visualization front-end UIs with JavaFX, AngularJS, and D3 to enhance operator control and situational awareness over system processes and compute resource management.
- RDT&E with Docker to containerize sonar applications for rapid deployment, security, and scalability in distributed systems.
- Conducted and delivered critical item testing as part of feasibility study to evaluate free open-source software capabilities as deliverable solutions to customer.

Software Engineer Intern **EMC Corporation, Data Domain** **May 26, 2015 – August 12, 2015**
Durham, NC

- Collaborated with the NFS team to develop multi-threaded implementations of NFSv4 to extend product storage functionality.
- Consolidated and enhanced team's debugging scripts for extending company-wide testing capabilities in production environment.
- Benchmarked data storage modules to target system optimization efforts.

Software Engineer Intern **Naval Surface Warfare Center Dahlgren Division** **June 2, 2014 – August 8, 2014**
Dahlgren, VA **June 22, 2013 – August 16, 2013**

- Integrated host-based intrusion detection system with AEGIS fleet combat system enhancing operator cyber security capabilities.
- Designed future ship power control GUI for managing tactical laser weapons to ship energy generation/storage systems.

SKILLS / LANGUAGES / TECHNOLOGIES / Practices

- C, C++, C#, Java, Python, Go, HTML, CSS, PHP, Bash Scripting, SQL, XML, JSON, YAML
- Amazon Web Services, Ansible, Docker, Virtual Machines, Linux (Red Hat / CentOS), Unix, Windows, Qt, Bootstrap, Material Design, JavaFX, Gradle, Mesos, Marathon, Android, Git
- Design Patterns, Data Structures, Problem Solving, Virtualization, Automation, Object-Oriented Design

PROJECTS

- Angena – Genealogy Program: C++, Qt
- Vidngo – Video downloader: Go, GTK+3
- OWASP-DC-XMLP – Vulnerability report compiler: Java, HTML/CSS

EDUCATION

Blacksburg, VA **Virginia Polytechnic Institute and State University** **August 2013 – May 2016**

- B.S. in Computer Science, May 2016

1st Place Faculty Choice Capstone, Virginia Tech Computer Science Undergraduate Research Symposium
“Neuroevolution of Augmenting Topologies and Machine Learning – Finite Solution Spaces”

- Developed, integrated, demonstrated, and measured open-source NEAT implementation effects on training AI to play Connect Four utilizing Java and AWS EC2.

Visit my website at michaellouie.xyz for a detailed portfolio and resume