

Liam McFadden

(Top Secret/SCI Security Clearance)

(315) 949-0201 | 80lmcfadden@gmail.com | liammcfadden.com | github.com/LiamMcFadden | linkedin.com/in/80-liam-mcfadden/

EDUCATION

B.S. Computer Science, Virginia Tech | Leadership & Service Minor | December 2022

- **Coursework:** Data Structures, Systems, Algorithm Design and Analysis, Human Computer Interaction Design, Computer Organization, Android Development
- **Virginia Tech Corps of Cadets / Army ROTC**
 - Military Style Leadership Program and Army Officer Preparation
 - Served in multiple positions of leadership where I was responsible for the accountability/training of up to 50 other cadets
- **VTCC / VT Cyber Club**
 - Competed in CTFs and helped to teach newer members cybersecurity basics

GIAC Certified Incident Handler (GCIH) | January 2024

- **Coursework:** Password attacking, detecting exploitation/post-exploitation techniques, incident response, basic malware analysis, network and log investigations, scanning and mapping, web application security

Cyber Basic Officer Leadership Course (CyBOLC) | September 2025 - June 2026 | Fort Gordon, GA

- **Coursework:** Cisco Network Academy CCNA training course, Python programming, OS fundamentals and threat detection in Windows and Linux, network enumeration, offensive/defensive computer security

SKILLS

Languages:

Bash, C, C++, HTML/CSS, Java, JavaScript, MATLAB, Python, Rust

Tools/Technologies:

Agile Methodologies, Clearcase, GDB, Git, Hashcat, IBM Rhapsody, Lauterbach TRACE, Linux (Arch, Ubuntu, Kali, RHEL, CentOS), Make, Netcat, Networking, Nmap, Protobuf, React Native, UML, Volatility, Wireshark, Zeek

EXPERIENCE

Army Cyber Institute, Research Intern | July 2021 - August 2021 | West Point, NY

- Worked on a small team to port a large MATLAB project to Python 3

General Dynamics Mission Systems, Embedded Software Engineer II | January 2023 - Present | Dedham, MA

- **Mounted Mission Control Transport Encryption Device (MMC-TED)**
 - **Transceiver Bypass | C++, Clearcase, Make, Protobuf, Rhapsody, RHEL, UML**
 - Designed, built, and tested software to filter messages between the Transceiver and MMC-TED, enabling secure and stateful packet handling
 - Implemented stateful packet filtering with timeouts and a modular architecture to support extensible message types
 - **Audit Log | C++, Clearcase, Make, Protobuf, Rhapsody, RHEL, UML**
 - Redesigned audit logging system to meet updated project requirements, including Protobuf integration and CSV export functionality
 - **Test Tool & CI/CD Pipeline Integration | Git, Bash, GitLab, Protobuf, Python, RHEL**
 - Redesigned test tool, called the Hostinator, for use with MMC-TED; adopted by a team of ~20 engineers for testing and validation
 - Designed, implemented, and integrated a full-scope test suite into the build pipeline
- **Tactical Local Area Network Encryption (TACLANE)**
 - **Bug Fixes and Improvements | C++, Clearcase, Lauterbach Probe, Make, Rhapsody, RHEL, UML**
 - Wrote, addressed, and reviewed bug fixes across the whole suite of TACLANE products
 - Added stack canaries into the build for all TACLANE products and verified functionality with Lauterbach probe