

GENO E. FOSSAS

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EDUCATION

Northeastern University

MS, Computer Science

GPA: 3.7/4.0

May 2025

Boston, MA

University of Central Florida

BS, Computer Science

Burnett Honors Scholar, ACM-W@UCF Member

May 2021

Orlando, FL

EXPERIENCE

MIT Lincoln Laboratory

Student Technical Assistant

Sept 2023 - May 2025

Lexington, MA

- ◇ Implemented changes to previous LLVM enforcement pass to support changes in temporal compartmentalization protection requirements.
- ◇ Extended Linux kernel code to enforce requirements with ARM PAC and MTE.
- ◇ Implemented an inter-procedural post-dominator calculation in Python to generate post-dominating nodes for Linux kernel modules.

Summer Research Intern

May 2023 - Sep 2023

- ◇ Modified implementation of existing LLVM pass supporting automatic enforcement of spatial compartmentalization framework.

Northeastern University

Graduate Teaching Assistant

Sep 2022 - May 2025

Boston, MA

- ◇ Taught students operating system principles and security practices through office hours and one-on-one instruction.

Graduate Research Assistant

Sep 2021 - Dec 2024

- ◇ Developed Linux kernel memory security tools utilizing features of Intel and ARM platforms and compiler-assisted security policies.

Amazon Web Services

Software Development Engineer Intern

May - Aug 2021 & 2020

Seattle, WA

- ◇ Created React widgets and web consoles to simplify customer workflows in AWS Service Quotas and AWS Single Sign-On. Integrated widgets with internal RESTful APIs.

University of Central Florida

Undergraduate Research Assistant

Oct 2019 - May 2021

Orlando, FL

- ◇ Modified LLVM's register allocator to support a side-channel free architecture.

TECHNICAL SKILLS

Languages

C, C++, Python, JavaScript, HTML, CSS, Java, Bash

Libraries and Frameworks

React, Redux, Jest

Tools and Runtimes

Linux, Clang, LLVM, Git, Node.js, Docker

COMMUNITY INVOLVEMENT

ACM-W@UCF

Student Mentor

Aug 2020 - Apr 2021

University of Central Florida

- ◇ Advised freshmen on career preparation and undergraduate research.

AWARDS AND RECOGNITIONS

AnitaB.org

Grace Hopper Conference 2020 Student Scholar