Lily Foster

Information Technology and STEM Education ❁ Pronouns: she/her or they/them
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Summary

Individual with a strong background in technology, problem-solving, and music who is seeking to facilitate STEM education in South Carolina.

Skills

- Audio/Video Event Tech
- STEM Education
- Audio Engineering
- Robotics
- Documentation
- Information Technology
- Computer Programming
- Computer Networking

Work

Clemson University

Information Security Architect

May 2020 to May 2021

Under the Office of Information Security and Privacy (OISP), I was the primary architect and engineer for security systems implemented by the OISP:

- Built out and maintained network TAP and monitoring infrastructure with Gigamon
- Developed tools and scripts used to accelerate SOC tasks and incident response
- Built out and maintained vulnerability scanning infrastructure (for systems with Tenable.sc and websites with Netsparker)
- Managed firewalls (including F5 AFM, Cisco ASA, Palo Alto, iptables)
- Created SIEM correlations and alerts with Splunk Enterprise Security

Information Security Analyst

January 2017 to April 2020

Under the Office of Information Security and Privacy (OISP), I was a full-time analyst of Clemson's computer network:

- Identified potential cybersecurity threats
- Responded to and mitigated incidents and identified threats
- Prevented previous and potential threats from occuring in the future

VR Game Development Intern

January 2016 to December 2016

Under Dr. Stephen Moysey, I researched teaching applications of geological sciences field techniques in a virtual reality video game. The game, titled Virtual Reality Field Experiences, features a trip to the Grand Canyon where the gamer learns rock identification techniques and builds the stratigraphic column of the canyon.

Undergraduate Student Researcher — January 2015 to May 2016

Under Dr. Yue Wang, I researched quadrotor control algorithms and trust-aware manufacturing in the Interdisciplinary Intelligence Research Lab, or I²R Lab.

Volunteer

FIRST South Carolina

Event Tech, Info Tech, FTA — January 2015 to present

After three years of experience of participating in *FIRST* robotics programs and several years mentoring, I volunteer with *FIRST* South Carolina to support the programs by:

- Helping teams with their control systems and volunteering at events as the Field Technical Advisor (FTA) for *FIRST* Tech Challenge in the SC region
- Planning tech for events to support field networks, audio/video speakers and displays, and live streaming
- Managing organization-level technology for *FIRST* South Carolina

FRC - Metal in Motion 343

Mentor — December 2018 to present

After having several years volunteering with *FIRST* robotics programs as a mentor and Field Technical Advisor, I mentor the Oconee County team, Metal in Motion, by:

- Facilitating high school students learning Java and Object Oriented Programming (OOP)
- Teaching concepts for writing control systems and feedback loops (such as PID)
- Aiding students in designing high-reliability robotics programs

FTC - Starbots 6170

Mentor — September 2016 to June 2018

After having three years of experience of participating as a student in the *FIRST* Tech Challenge (FTC) robotics program, I mentored the Easley High School team, Starbots, and:

- Aided students in basic robot construction skills with the Tetrix system
- Facilitated high school students learning Java and writing robotics programs

Education

Clemson University

Computer Science, B.S. — July 2014 to May 2019

I studied computer science with interests in education, math, and language, including courses:

- Research & Development in Games for Learning
- Foundations of Digital Media and Learning
- 2D Game Engine Construction
- Virtual Reality Systems