FOSTER MCLANE
INFORMATION SECURITY ANALYST

👤 ABOUT

I am a computer enthusiast and enjoy almost everything to do with computers, from low-level logic circuits to high-level programming. I am especially interested in embedded programming, operation systems, program security, network security, and network protocols. In addition to my computer enthusiasm, I have a large interest in high school level education in computational thinking.

💼 WORK EXPERIENCE

Clemson University
🌐 https://ccit.clemson.edu/about/departments/security-operations-center/
December 2017 – Present

Information Security Analyst
Under the Office of Information Security and Privacy, I am a full-time analyst of Clemson's computer network for identifying potential cyber security threats, mitigating current threats, and preventing current threats from happening in the future.

FoosterNET, LLC
🌐 https://fooster.io/
November 2013 – Present

Owner
FoosterNET, LLC is a company I use for freelance work in cyber security consulting, system administration, and computer programming. It additionally sanctions all other services I provide for money including server hosting.

Clemson University
🌐 https://ccit.clemson.edu/about/departments/security-operations-center/
January 2017 – December 2017

Cybersecurity Intern
Under the Office of Information Security and Privacy, I was a part-time analyst of Clemson's computer network for identifying potential cyber security threats, mitigating current threats, and preventing current threats from happening in the future.

Clemson University
January 2017 – May 2017

Virtual Reality Intern
Under Dr. Stephen Moysey, I worked to bring virtual reality to the university in a variety of ways including setting up VR systems, coordinating generally available VR equipment for students and faculty, and creating demos for VR.

Clemson University
January 2016 – December 2016

Virtual Reality Game Development Intern
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.

Clemson University

◎ CONTACT

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Clemson, SC 29631 US

📞 **(919) FOOSTER**

✉ **fkmclane@gmail.com**

🌐 **https://fooster.io/**

⦿ **GitHub**
fkmclane

🏛 EDUCATION

2014
2018

Clemson University
🎓 Bachelor of Science

Computer Science, with an interest in Education, Math, and Langauge

Courses

◀ Algorithms

◀ Software Engineering

◀ Operating Systems

◀ Network Programming

◀ Principles of Programming Languages

◀ Computer Security Principles

◀ Special Topics in Embedded Computing

◀ Foundations of Computer Science

◀ Distributed and Cluster Computing

◀ 2D Game Engine Construction

◀ Virtual Reality Systems

2012
2014

SC Governor's School for Science and Mathematics
🎓 High School

Computer Science

Courses

◀ Advanced Computer Science

◀ Digital Logic

◀ Modern Physics

📊 SKILLS

Master

Undergraduate Student Researcher in UAV and Manufacuring Robotics
Under Dr. Yue Wang, I researched quadrotor control algorithms and trust aware manufacturing in the Interdisciplinary Intelligence Research Lab, or I²R Lab.

✹ AWARDS

January 2019	**Global Information Assurance Certification**
	🏆 GIAC Certified Intrusion Analyst
	The certification signifies a demonstrated knowledge of intrusion detection techniques as an information security analyst.
April 2014	**SC Junior Academy of Science**
	🏆 Outstanding Research and Presentation
	Awards: 1st Oral Presentation - Computer Science, 1st Written Presentation - Computer Science. The awards included an invitation to the American Junior Academy of Science.

👥 VOLUNTEER

GIAC Advisory Board
🌐 https://www.giac.org/certified-professionals/advisory-board
January 2019 – Present

Member
After completing my GCIA certification from GIAC, I've been invited to the GIAC Advisory Board which takes an active role in the GIAC program and in SANS training.

FRC - Metal in Motion 343
🌐 https://metalinmotion.com/
December 2018 – Present

Mentor
After having several years volunteering with FIRST as a mentor and Field Technical Advisor (FTA), I mentor the nearby Oconee team, Metal in Motion.

FTC - Star Bots 6170
🌐 http://ehs.pickens.k12.sc.us/fine_arts_organizations/student_life/robotics_club
September 2016 – Present

Mentor
After having three years of experience of participating in the FIRST Tech Challenge robotics competition, or FTC, including one year of which I was team captain and made it to the super regional competition, I mentor the nearby Easley team, Starbots.

SC Robotics Education Foundation
🌐 http://scref.org/
January 2015 – Present

Field Technical Advisor and Field Inspector
After three years of experience of participating in the FIRST Tech Challenge robotics competition, I volunteer to run the scrimmage hosted by the SC GSSM and am the main technical coordinator for the state competition.

Programming

C   C++   C#   Python   JavaScript
Java   PHP

Unix Administration

Website Deployment   Virtual Machines
Networking   General Services
RedHat Enterprise Linux   Ubuntu   Arch Linux
Gentoo Linux   Debian   FreeBSD

Network Security

Cisco   Palo Alto   pfSense   Endian
UniFi

Virtualization

libvirt   oVirt   Stateless Hypervisors   PXE

Software Development

REST   Robot Operating System   GTK+

Game Development

Unity 3D   Pyglet

Web Development

HTML5   CSS3   JavaScript   Semantic UI
PHP   Python   Django

Computer Graphics

Blender   GIMP   Inkscape

Text Editing

Neovim   Vim   Vi

Documentation

LaTeX   Markdown   VimWiki

Gentoo Overlay - fkmclane
🌐 https://github.com/fkmclane/overlay
May 2013 – Present

Owner
I have a recognized overlay for my distribution of choice for my workstation, Gentoo. I maintain over 150 packages in this overlay that range from little X11 tools to the Unity Editor, from the game engine, for Linux to all of the Linux software associated with Plex. Additionally I have a few of my own tools that I wrote such as one to manage tty sessions intelligently without having a display manager.

CU Cyber
🌐 https://cucyber.net/
August 2015 – April 2018

Level 5 Tech Support
CU Cyber is the cyber security club at Clemson University. We participate in cyber defense competitions and hold weekly seminars involving cyber security. I was the secretary and then Level 5 Tech Support of CU Cyber where I maintained club organization, club preparation, and various technological aspects. I additionally helped create many of the weekly seminars given.

CU Rocket Engineering
January 2017 – August 2018

Lead Avionics
As lead avionics, I coordinated the team that created the electronic internals of the rockets we flew at the Intercollegiate Rocket Engineering Competition. I did a lot of the design work and kept the team productive.

Clemson ACM
🌐 https://www.cs.clemson.edu/acm/
September 2014 – January 2017

Webmaster
ACM, the Association for Computing Machinery, is the world's largest society for scientific and educational computing. I was the webmaster of Clemson University's local chapter where I created and maintained their website.

📖 PUBLICATIONS

Trust-Based Mixed-Initiative Teleoperation of Mobile Robots
🔖 American Control Conference
06 July 2016
🌐 http://ieeexplore.ieee.org/abstract/document/7526640/

Trust-Based Mixed-Initiative Teleoperation of Mobile Robots is a scheme for the bilateral teleoperation of mobile robotic systems using a quadrotor, ground robot, and a haptic feedback device. In the scheme, control is shared between human and autonomous controllers with the human controller having force feedback cues. Two-way trust models are calculated to dynamically scale each control input for optimal performance and reduced physical workload of the human operator. The results indicate that the proposed scheme improves task performance by 31% and reduces the operator workload by 23.9%.

Vision-Based Control of a Quadrotor
🔖 SC GSSM
01 February 2014

Vision-Based Control of a Quadrotor uses a quadrotor and its two mounted cameras to have the quadrotor perform basic analysis of its environment and make decisions based on it. It includes basic applications for following a marked path or object and an extensible interface for writing more complex autonomous logic.