

# John “Jack” Lee

jack@jacklee.xyz | https://jacklee.xyz | github.com/kcajeel

## EDUCATION

### Embry-Riddle Aeronautical University

*Bachelor of Science in Computer Science, Cybersecurity Engineering Concentration*

*Dean's List*

Daytona Beach, FL

*Expected May 2025*

*3.58 GPA*

## WORK EXPERIENCE

### Research and Development Intern

May 2024 - Present

*Keysight Technologies*

*Remote*

- Developing requirements for the US Cyber Trust Mark with the Consumer Technology Association
- Created an internal tool to generate software plugin boilerplate, saving valuable development time
- Developed a web application using a Large Language Model to evaluate documents against given requirements

### Cybersecurity Engineering Lab Manager

January 2024 - Present

*Embry-Riddle Aeronautical University*

*Daytona Beach, FL*

- Maintain and configure an air-gapped attack and defense laboratory for instructional and research use
- Manage virtual machines of diverse operating systems for penetration testing classes and Capture The Flag (CTF) competitions
- Created a scoreboard website that integrates with a database and scoring engine for an in-house CTF competition

### Product Management Intern

May - August 2023

*Keysight Technologies*

*Austin, TX*

- Configured a lab network with multiple virtual machines and devices across wired and wireless interfaces
- Communicated with various stakeholders to determine the validity of a third-party product integration
- Wrote public-facing product documentation regarding 5G O-RAN network testing and IoT security testing

### IoT Security Research Intern

May - August 2022

*Keysight Technologies*

*Remote*

- Performed fuzz testing against TCP/IP and Bluetooth interfaces to find implementation flaws in IoT devices
- Discovered and disclosed a Bluetooth vulnerability in a leading smart doorbell causing the video feed to stop
- Created video demonstrations of vulnerability testing for marketing and sales use

## PROJECTS

### VANTAGE Senior Design Project | 4-person team | *Python, Julia, Git, Scrum, Jira*

August 2024 - Present

- Document and design a simulation environment for autonomous Uncrewed Aerial Systems research
- Integrate multiple dependencies using Python and Julia for a cohesive user experience across a UI and API
- Created documentation and shell scripts to assist with software installation

### AES-256 Implementation | 2-person team | *Rust, Test-Driven Development, Git, Scrum*

March 2023

- Developed decryption and key expansion code based on technical specifications such as FIPS 197
- Followed Test-Driven Development principles by writing unit tests for each encryption and decryption step
- Planned division of labor and led scrum meetings to discuss sprint progress

### FitSage Fitness App | 4-person team | *Dart, Flutter, SQL, Git, Scrum*

January - May 2023

- Developed a mobile app for fitness management with OCR functionality for scanning Nutrition Facts labels
- Wrote detailed documentation before development to assist the team and refine the application design
- Implemented UI views based on wireframes, concept art, and documentation to meet the software requirements

## TECHNICAL SKILLS

**Languages:** Rust, Java, C, C++ Go, Python, Julia, JavaScript, SQL, HTML, CSS, Dart, Gleam, Bash, TLA+

**Frameworks:** Flutter, Django, Tauri, Dioxus, Metasploit

**Operating Systems:** Linux (Debian-based, RHEL-based, Gentoo, Arch), MacOS, Windows

**Developer Tools:** Git, GitHub Actions, VS Code, Zed, Visual Studio, CLion, IntelliJ, Eclipse, Vim, Markdown, LaTeX

**IT Skills:** VMware ESXi/Vsphere, Active Directory Domain Services, Shell competence, Wireshark, Nmap, OSI Model

**Natural Languages:** English (Native Proficiency), Spanish (Working Proficiency Reading-Writing)

**Honors:** ACMSE Programming Competition Second Place (2024), Dean's List, CyberPatriot First in State (2019)

**Organizations and Clubs:** ACM, IEEE, AI Club, Cybersecurity Club, WIKD 102.5 Radio Station