

Jack Ford

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EDUCATION

The University of Kansas

Bachelor of Science in Computer Science

Overall GPA 3.93/4.0 | Credits: 125

Honors Student

Cybersecurity Undergraduate Certificate

Lawrence, KS

Expected May 2025

Relevant Courses: Software Reverse Engineering, Introduction to Information and Computer Security, Cyber Defense (gained exposure to Wireshark, NMAP, Snort, Security Onion, Metasploit), Introduction to Communication Networks, Introduction to Operating Systems (Gained exposure to GDB), Programming Languages, Introduction to Database Systems, Introduction to Machine Learning, Embedded Systems, Computer Architecture, Programming Language Paradigms, Data Structures and Algorithms, Software Engineering 1 (gained exposure to Docker), Programming 1: Honors, Programming 2, Discrete Structures, Probability and Statistics, Introduction to the Theory of Computing, Calculus 1, Calculus 2, Calculus 3, Introduction to Digital Logic: Honors

Current Enrollment: Advanced Software Security Evaluation, Computer Forensics, Compiler Construction, Software Engineering II

INTERNSHIP

Air Force Civilian Service

Cyber Security Analyst Intern

Supervisor: Jason Schalow, (661) 277-9525

Edwards Air Force Base, CA 93524

May 20 2024 – August 09 2024

- Analyzed and developed techniques for de-obfuscating obfuscation methods
- Conducted a penetration test on a local machine, presenting findings and methodology to supervisors.
- Worked on mission-critical tasks, including Security Information and Event Management (SIEM) operations within the Security Operation Center (SOC) and performing malware analysis in a dedicated malware lab
- Regularly taught and presented cybersecurity concepts to peers, superiors, and students, including educational sessions for elementary students.

ACTIVITIES

Information Security Club (Jayhackers)

Supervisor: Bo Luo, (785) 864-7749

March 2023 – Present

- Compete in CTF events/tournaments and hacking competitions alongside a group of my peers
 - PicoCTF 2023 (Gained exposure to Ghidra)
 - SekaiCTF 2023
 - BuckeyeCTF
 - Practiced reverse engineering and binary exploitation concepts
 - USCCTF
 - 15th overall (individual)
 - Practiced reverse engineering and binary exploitation concepts
 - Practiced web exploitation, cryptography, forensics, and OSINT
 - 1337UP LIVE CTF
 - Practiced reverse engineering and binary exploitation concepts
 - Best Cyber Warrior X CTF Competition
 - 1st collegiate division (team)
 - 9th overall (team)
 - Practiced reverse engineering and binary exploitation concepts
 - NCL 2025
 - 7th overall out of over 450 teams
 - Practiced reverse engineering, networking, cryptographic, and analysis techniques

- Learn about current events and recent advancements in the field of Cyber Security

Upsilon Pi Epsilon (Computer Science Honor Society)

September 2023 – Present

Supervisor: Drew Davidson, (913) 321-3143

KU Men's Club Volleyball

August 2021 – Present

President

April 2022 – Present

Supervisor: Howard Graham, (785) 864-4277

- Lead group of about 30 peers
- Organize practices, travel arrangements, volunteer events, and tournaments
- Manage finances and dues working alongside the KU Sports Club organization to maintain good standing of the club
- Coordinate with the National Collegiate Volleyball Federation (NCVF) sending multiple KU teams to regular season tournaments (crossovers, regionals, conference) and national competitions

Tau Beta Pi (Engineering Honors Society)

January 2024 – Present

Supervisor: Lorin Maletsky, (785) 864-2985

SCHOLARSHIPS & ACHIEVEMENTS

- The CyberCorps Scholarship for Service (SFS) Program – 2-year scholarship + stipend and benefits (June 2023-May 2025)
- KU Excellence Award Recipient – \$64,000 total for four years
- Garmin Award Recipient – \$2,000 for 2022-23 school year
- Disney Scholars Award Recipient – \$5,000 per year
- NMSQT National Rural and Small Town Recognition Program Award Recipient

RELEVANT PROJECTS

Github: <https://github.com/shortestllama>

- Obfuscation analysis: C/C++, x86-64
 - Solved obfuscated crackmes and ctfs from “crackmes.one” and “picoctf.org”
 - Worked on methods such as packers, anti-debug, anti-disassembly, self-modifying code, and encryption
- Packing methods analysis: C/C++, x86-64
 - Currently working on investigating and exploring different packing techniques to discover their effectiveness
 - Will culminate into a presentation that will be in front of a panel of three department faculty members acting as judges
- Pic-A-Pass: Python
 - Worked as part of a team to develop a functional password manager that uses steganography as a unique component
 - Aided in the development of the program to ensure passwords were stored securely on each users' local device using password hashing and steganography
- Quash: C++
 - Terminal command line emulator based off of bash
 - Used and developed skills with operating system control execution
- Rustbucket: Rust
 - Utility with potential security exploits for security researchers and students alike
 - Developed in a weekend at HackKU25 to gain experience with rust
- Ro-Board: Python/Choregraphe
 - Robot that plays Connect Four against you
 - Developed robotic, kinematic, and networking skills
- Snake: Scratch
 - Developed a normal snake game in a block programming language

- Learned new programming techniques from the limitations of the block programming language such as timing and object execution control
- Advanced Pong: Python3 (Pygame)
 - Traditional 8-bit Pong game made with the pygame library and OOP
 - The twist: upgrades randomly appear on the screen throughout the game to mess your opponent up if the ball goes through it
 - E.g. ball speeds up, ball slows down, ball splits into 3 paths, etc.
- Horde Defense: Python3 (Pygame)
 - 2D Black Ops Zombies-like game with rounds and increasing difficulty made with pygame library and OOP
 - 4 playable characters, each with their own unique weapon

SUMMARY OF SKILLS

Rising Senior at the University of Kansas, majoring in Computer Science and Electrical Engineering focused on developing and expanding my knowledge and skills with a career in cybersecurity.

- Gained practical experience as a United States Air Force Civilian Cyber Security Analyst Intern through the CyberCorps® Scholarship for Service Program
- Demonstrated abilities in problem-solving, pattern recognition, and building effective solutions for complex challenges
- Proficient in identifying security vulnerabilities, enhancing system defenses, and re-engineering processes for improved cybersecurity
- Passionate about contributing to government efforts in protecting critical infrastructure and national security, with a strong commitment to continuous learning and skill development
- Strong coding skills in multiple languages and experience across diverse operating systems:
 - Languages: x86-64, C/C++, Python, MIPS, Java, JavaScript, SQL, HTML
 - Operating Systems: Linux (Kali, Ubuntu), Windows 11, macOS
- Other skills:
 - Languages: English (Native), German (Intermediate)
 - Technical: C/C++ – Proficient, x86-64 – Proficient, Linux – Proficient, Python – Proficient, Windows – Intermediate, SQL – Intermediate, Java – Intermediate, JavaScript – Intermediate, HTML – Intermediate, Advanced Mathematics – Proficient, iOS – Intermediate, Mac OS – Intermediate, Windows – Intermediate, Microsoft Office (Excel, Word, PowerPoint) – Intermediate, Social Media (YouTube, TikTok, Snapchat, Twitter, Instagram, Facebook, Reddit, Discord, Twitch) – Proficient

EMPLOYMENT REQUIREMENTS

Citizenship: American-born US Citizen

Veteran's Preference: No

Security Clearance: Secret

Registered for Selective Service: Yes

Location Preferences: Flexible with a focus on California, Washington D.C., Illinois

ADDITIONAL WORK EXPERIENCE

Lawrence Landsharks

Assistant Volleyball Coach

Supervisor: Kalissa McAtee, (785) 550-4222

4120 Clinton Pkwy Frontage, Lawrence, KS 66047

October 2022 – March 2023

18 hours/week, \$25/practice, \$50/tournament

- Helped oversee the execution of practice plans for 2 teams of approximately 10 high school aged girls
- Communicated with high schoolers, parents, officials, and other coaches on problem solving ideas
- Developed my public speaking abilities in front of large groups of people

Ambler Student Recreation and Fitness Center

Weight Room Specialist

Supervisor: Miranda Kolenda, (785) 864-1822

1740 Watkins Center Drive, Lawrence, KS 66045

June 2022 – November 2022

10 hours/week, \$10/hour

- Monitored and cleaned a weightlifting facility with upwards of 300 students at any one time
- Rounded up towels around the facility to have washed and cleaned

Walmart **2300 US-34, Oswego, IL 60543; 550 Congressional Drive, Lawrence, KS 66049**
Personal Shopper; Stocker *June 2020 – September 2020; July 2022 – August 2022*

June 2020 – September 2020; July 2022 – August 2022

- ## Chicagoland Pool Management Group

1612 Ogden Ave Suite 101, Lisle, IL 60532

July 2018 – September 2018; June 2019 – September 2019

24 hours/week, \$9/hour

- Facilitated a protective environment by conducting required safety protocols for 300 daily attendants
- Maintained the facilities of the job site throughout the day