

Yusuf Saquib

+1 (734) 382-8251 | yusufsaquib@gmail.com | yusufsaquib.com | github.com/ysaquib | linkedin.com/in/ysaquib

Education

Carnegie Mellon University | Master of Science in Computer Science

Aug 2022 - Aug 2023

- Conducted security research on deception evaluation.
- **Key Courses:** Graduate Computer Networks, Secure Software Systems, Computer Architecture, Foundations of Blockchains.
- **Advisor:** Dr. Vyas Sekar.

Carnegie Mellon University | Bachelor of Science in Computer Science

Aug 2018 - May 2022

- Minor in Business Administration.
- **Key Courses:** Computer Networks, Computer Security, Security and Logic, Algorithm Design and Analysis, Embedded Systems.

Work Experience

Inpleo | Security Engineer

Jan 2024 - Present

- Conducted threat modelling for organizational architecture and infrastructure to identify potential security risks and vulnerabilities in addition to recommending mitigation strategies.
- Developed and implemented security policies, procedures, and controls to ensure compliance and adherence with industry security standards and regulations (e.g., ISO 27001, GDPR, SOC2).
- Monitored security events and incidents to detect and respond to security breaches and threats.

Carnegie Mellon University | Research Assistant

Dec 2021 - Jun 2022

- Conducted in-depth experiments to identify Bluetooth vulnerabilities and potential attack vectors.
- Analyzed over 20 traces with 50,000+ packets each to present and discuss findings with the research team.

Carnegie Mellon University | Course Assistant

Jan 2019 - Dec 2021

- Contributed to the delivery of 4 computer science courses by holding office hours to help students understand complex course concepts.
- Graded over 75 assignments for over 200 students and provided constructive feedback to promote their academic growth.
- Met regularly with professors to discuss students' concerns and offer curriculum feedback, leading to improved course delivery and content.

Melakia | Sole Founder

Dec 2018 - Aug 2021

- Founded an online clothing brand specializing in Arabic Calligraphy, offering unique, customized designs to customers worldwide.
- Managed and monitored all aspects of the business, including product design, order fulfillment, customer service, and financial operations.

Projects

Video Content Distribution Network

Nov 2021 - Dec 2021

- Designed and implemented a Video Content Distribution Network (CDN) that used a custom-built Domain Name Server (DNS) using the C programming language as a course project.
- Developed a dynamic system that served different video bitrates based on the client's connection, ensuring seamless playback, optimizing video quality, and reducing buffering times.

BitTorrent-Like Peer-to-Peer Network

Oct 2021 - Nov 2021

- Designed and implemented a BitTorrent-like decentralized peer-to-peer network and custom network protocol built on top of UDP using the C programming language as a course project.
- Incorporated TCP mechanisms to ensure the reliability of data transfers in the network.
- Implemented congestion control and avoidance strategies such as AIMD to optimize network performance, minimize delays, and prevent network collapse.

Academic Research

Perry: A What-If Analysis Platform for Deception Evaluation | Carnegie Mellon University

Sep 2022 - Aug 2023

- Designed a realistic, flexible, extensible, and automated platform to evaluate the efficacy of deception techniques under a variety of network scenarios.
- Implemented the system using a combination of open-source software and custom-made extensible libraries and packages.
- Performed a comprehensive evaluation of the system's performance by executing hundreds of experiments across several scenarios, using different defensive strategies and deception techniques.
- Showed that deception is indeed effective at preventing certain attackers and that the platform is useful for evaluating deception techniques.

Skills

Programming	C, Python, SML NJ, TypeScript, JavaScript, HTML/CSS, Java, Assembly (x86-64, ARM), Dafny.
Miscellaneous	Unix, Bash, LaTeX, Google Firebase, Git, Adobe Creative Cloud, GDB, Kubernetes, Docker, Security Research, Cybersecurity.
Extra Curriculars	Planetary Society President, Computing Club President, NSA Codebreaker CTF 2021, Qatar Taekwondo Sparring Tournament.
Languages	English (Native), Arabic (Native), Urdu (Proficient).

Certifications

2019	Basic Life Support and First Aid , Qatar Red Crescent
2017	Second Dan Black Belt , Kukkiwon - World Taekwondo Headquarters