Ansh Dixit

E-mail | LinkedIn|E-portfolio

Education

Conestoga College Kitchener, ON
Bachelor of CyberSystem Engineering *08/2022 – 12/2026*

Experience

Undergraduate Volunteer 06/2023 – Present
Conestoga College *Cambridge, ON*

- Engaged in volunteer activities to support various initiatives within the college community, demonstrating a commitment to giving back and enhancing the student experience.
- Actively participated in organizing campus events and assisting with student-focused programs to foster a positive learning environment.

Precision Metal Fabrication Specialist 04/2023 – 08/2023
Linamar Corporation *Norwich, ON*

- Operated CNC machinery with integrated software, ensuring timely updates and patches were applied to minimize operational risks and protect against unauthorized access.
- Enhanced team productivity by streamlining processes and implementing time-saving strategies.
- Identified and resolved a recurrent software anomaly in production line machinery, preventing potential security vulnerabilities and improving system reliability.

Customer Experience Executive 08/2023 – 12/2023
Indigo Books and Music *Cambridge, ON*

- Enhanced customer satisfaction by implementing efficient problem-solving techniques and providing personalized assistance.
- Reduced customer complaints by proactively identifying issues and implementing targeted solutions.

Projects

Arcade Snake | *C, C++, GitHub*

- Engineered secure algorithms for an Arcade Snake game in C, incorporating cyber security principles to mitigate risks and prevent exploits, showcasing a meticulous approach to secure software development.
- Proactively identified and remediated potential security vulnerabilities, demonstrating a commitment to cyber security excellence and a problem-solving mindset.

Temperature Controlled Fan | *Arduino Uno, C++, C, GitHub*

- Implemented a secure, networked temperature-controlled fan system using Arduino Uno, leveraging networking concepts for secure data transmission and applying real-time server configurations for dynamic fan speed adjustments.
- Showcased practical application of cybersecurity in IoT devices by establishing encrypted communications between temperature sensors and the control system, ensuring data integrity and system reliability.

Raspberry Pi Robot — *C, C++ Language, Raspberry Pi Zero W*

- Developed a secure control system for a Raspberry Pi Zero W-powered robotic car, applying cyber security measures to safeguard communications and control mechanisms against unauthorized access.
- Integrated advanced computer vision, sensor technologies, and cameras, facilitating precise environmental navigation and enhancing operational security through collaborative engineering efforts.

Mobile Security Control System — *Linux, C/C++, Ubuntu, GitHub*

- Architected a Linux-based mobile security control system, integrating advanced security protocols to ensure data integrity and protect user privacy, reflecting a forward-thinking approach to cybersecurity.
- Explored and implemented emerging technologies such as AI and blockchain to bolster system security.
- Conducted debugging to identify and resolve software issues.
- Developed test cases for validating system functionality

Technical Skills

Languages: Python, C, C++, HTML/CSS, JavaScript/TypeScript
Developer Tools: Git, VS Code, Visual Studio, Arduino IDE, Raspberry Pi, Linux, Ubuntu, GitHub, Docker, Google Cloud Platform, AWS.