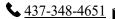
Junseok Lee









EDUCATION

McMaster University

Bachelor of Engineering in Computer Engineering (CO-OP)

Expected Completion, April 2026

Hamilton, Ontario, Canada

- Enrolled in Level 4 of the Computer Engineering (Co-op) at McMaster University with a cumulative GPA: 3.1/4.0.
- Relevant Coursework: Logic Design, Digital Signal Processing, Circuits and Waves, Programming, Hardware Design, Web and System Development, Control System, SCADA System

SKILLS

- Programming Languages: C, C++, Python, Java, JavaScript, Verilog (FPGA), Bash, HTML/CSS
- Control Systems & Hardware: CODESYS (PLC), SCADA Systems, Arduino, Danfoss Plus+1 Guide & Service Tool, PSpice, LTSpice, AutoCAD, SolidWorks, Electric Circuit Design, Embedded Systems, Hardware Debugging
- Development & Analytics: Git, GitHub, GitLab, Linux

WORK EXPERIENCE

SROOK Pay | South Korea | Google Analytics, Java, JavaScript, MySQL, HTML/CSS

June 2024 - August 2024

- Developed integrated website reports using Java and JavaScript, optimizing system performance and design.
- Analyzed consumer behavior by managing and retrieving Google Analytics data through MySQL and Google Cloud, improving data-driven decision-making.

Flodraulic | Georgetown, Canada | CODESYS, CAN Protocol, Danfoss Plus+1, AutoCAD, Flutter August 2024 - August 2025

- Designed and implemented HMI system, integrating control system and hydraulics using CODESYS, AutoCAD, Danfoss +1 Guide/Service tool (Logic Design tool) as a Control System Engineer.
- Diagnosed and resolved wireless system issues (transmitters, receivers, internal logic, cable harnesses), reducing troubleshooting time by 40%.
- Conducted hardware diagnostics and implemented customer-requested program logic updates onsite to meet specific functional requirements.
- Developed custom debugging solutions tailored to client needs using Flutter, improving diagnostic accuracy and enhancing user experience for the company's app.
- Managed data visualization with Adobe XD, Illustrator, and Microsoft Excel, streamlining reporting processes.

PROJECTS

Hardware Implementation of an Image Decompressor | Verilog, C

December 2023

Developed custom decoding circuitry to process. mic17 compressed images, utilizing UART for data transfer and SRAM for storage and applied Color Space Conversion and Inverse Discrete Cosine Transform (IDCT) to enhance image quality while optimizing memory and processing efficiency.

Pacemaker | Pacemaker, Python, MATLAB Simulink (GitHub

December 2024

- Designed a Digital Circuit Model (DCM) to simulate the bioelectrical interface between a heartbeat programming application (built with **Python Tkinter**) and a pulse generator.
- Programmed the pacemaker's functionality for multiple operational modes and integrated real-time electrogram simulations using MATLAB Simulink.

Integrated Automation Control System | Python, Arduino, CAN BUS interface

May 2025

- Developed an Arduino-based control system at Flodraulic, optimizing real-time data handling and device operability via CAN bus with dynamic protocol and baud rate adjustments.
- Engineered a real-time CAN bus system with dynamic protocol selection, improving communication efficiency.
- Achieved an 80% reduction in device testing time through embedded diagnostics and enhanced LED/button feedback.

LEADERSHIP

Korean Students Association of Canada (KSAC) | Head Finance of Student Affairs

June 2022 - June 2025

Managed event budgets exceeding *\$6,000*, coordinating 10+ networking events for Korean engineering students.

Korean Students Association of Canada (KSAC) | Head of IT

June 2022 - Present

Maintained KSAC website, ensuring stability and user-friendly design and implemented security measures and supported new feature development. (https://ksaccanada.com/)

