Mukesh Sabesan

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Objective

Highly motivated Computer Engineering student with a strong foundation in software development, system design engineering and control systems. Well versed in the Electrical and Nuclear Generation industry coming off a 16-month internship with Ontario Power Generation.

Education

Bachelor of Engineering (B. Eng), Computer Engineering

Sept 2021 – April 2026

Toronto Metropolitan University (TMU)

Relevant Courses: Microprocessor Systems, Signal and Systems, Object Oriented Programming Analysis and Design, Data Structures and Algorithms, Digital Systems, Software Systems, Database Systems

Technical Skills

Languages & Scripting: MATLAB, Python, C, C#, C++, SQL, HTML, CSS, Java, JavaScript, VHDL, Tools & Technologies: MATLAB, Intel Quartus II, Linux, UNIX, Perforce, Git, VMWare, Microsoft Office, Power BI, Power Apps, KiCAD, AutoCAD

Experience

Professional Engineering Year Student (Intern)

May 2024 – Aug. 2025

Ontario Power Generation (OPG)

Pickering, ON

- Worked under the Computers and Control Design team, contributing to **computer control system development and testing** on the **Pickering Nuclear Generating Station (PNGS)** of OPG.
- Compiled editable Excel sheets of 5000 rows of PNGS Digital Control Computer (DCC) U1/4
 Input/Output lists (IOL) and annunciations, assisting Operations and Safestore Engineering to monitor IOs
 during the stabilization and storage phases of the PNGS Safe Storage project.
- Developed a Python-based automation script to monitor the Safe Storage project at the PNGS A-side reactors, enabling efficient tracking of defueling activities, progress, and error detection.
- Authored and enhanced comprehensive test plans and procedures to evaluate the hardware capabilities of the PNGS A-side (P014) Annunciation Command Processing (ACP) SSD, Sequence of Events Gateway (SOE GW), Maintenance Console (MC PC) and PNGS B-side (P058) Annunciation System Printers, supporting the reliable operation of the PNGS DCC systems.
- Contributed to the P014 Defuel Software Modification by developing field installation, removal guidelines, and developing a preparation and verification guideline for the Magneto-Optical (MAGO) media to ensure proper data collection during the defueling process.
- Received seven recognitions from five managers/acting managers for contributions to the P058
 Annunciation System Printers, PNGS DCC IOL compilation and P014 Safe Storage Project, including a
 Power of You Award nomination for the P014 Defuel Software Modification project.

Project Manager Sept. 2023 – Dec. 2023

Faculty of Engineering & Architectural Science at TMU

Toronto, ON

- Facilitated and managed teams of more than 30 engineering students in the successful planning and execution of multiple projects, ensuring effective collaboration and timely achievement of milestones.
- Coordinated every aspect of project execution, from conception to completion, enabling a student team to advance in the TMU Student Design Competition through focused task management and continuous progress evaluation.