Ayaan Sethi

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SKILLS

- **Programming:** MATLAB, Java, Python, JavaScript, HTML/CSS, Node.js, Assembly, C++, C, VHDL/Verilog, SQL
- **Technologies:** Git, JavaFx Scene Builder, Oracle, MultiSim, Quartus
- **Multilingual:** English, French, Urdu, Punjabi, and Hindi.

EDUCATION

Toronto Metropolitan University **Toronto, Ontario**

B. Eng - Computer Engineering - Software Engineering Option *Expected Graduation, May 2027*

- **Dean's List**
- **Related Coursework:** Data Structures & Algorithms, Object Oriented Programming, Software Systems, Digital Systems, Database Systems, Signals and Systems, Electronics Circuits, Computer Programming

Streetsville Secondary School **Mississauga, Ontario**

Ontario Secondary School Diploma *September 2018 - June 2022*

- Ontario Scholar, Honour Roll
- French Immersion

PROJECTS

Central Processing Unit ***December 2023***

- Developed three distinct CPUs incorporating multiple logic units, including decoders, Finite State Machines (FSMs), flip-flops, and general logic gates, using VHDL and implemented them on FPGA.
- The CPUs successfully performed a range of operations on two inputs, including advanced and basic logic functions, arithmetic operations, parity checking, bit rotation, input comparisons, and more.

Banking Application ***March 2024***

- Developed a comprehensive banking application with secure login verification for clients and administrators, supporting full banking transactions and managerial actions.
- Designed an engaging User Interface using JavaFX and FXML SceneBuilder, focusing on intuitive layout, responsive interactions, and visual appeal to enhance the overall user experience.

Rock Paper Scissors Game ***June 2024***

- Created a full-stack Rock-Paper-Scissors game with user-versus-computer mode, incorporating random computer moves and real-time score tracking for an interactive experience.
- Managed the project using Git and GitHub repositories, implementing efficient branch management strategies to ensure seamless revision and project completion.

Cascaded BJT Amplifier ***March 2024***

- Developed an optimized amplifier by cascading BJT Common-Emitter and Common-Collector amplifiers to create an efficient amplification circuit using MultiSim.
- Conducted performance analysis, measuring gain, bandwidth, and distortion. Verified stability through frequency response ensuring the amplifier met design specifications under various operating conditions.

ACTIVITIES AND LEADERSHIP

Toronto Metropolitan Baja Racing Design Team **Toronto, Ontario**

Member of Electrical Team *September 2024- Current*

- Collaborating with team members on tasks related to the Baja Racing Vehicle, including the integration and troubleshooting of sensors and other electrical components.

Metropolitan Undergraduate Engineering Society

Operations Committee *August 2024 - Current*

- Responsible for developing and promoting undergraduate engineering initiatives, with a focus on designing and marketing merchandise.