Abdullah **Syed**

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EDUCATION:

Toronto Metropolitan University   **Toronto, Canada**

Electrical Engineering – Bachelor of Engineering   *2019-2024 (Expected)*

Relevant Courses: • Microelectronic Circuits • Digital Signal Processing • Digital Control Systems •Communication Systems • Energy Conversion • Electromagnetics • Microprocessor Systems • Digital Systems • Robotics

SKILLS & INTERESTS:

- **Languages Spoken:** English, Urdu, Hindi
- **Programming Languages:** Java, C, MATLAB, JavaScript, HTML, CSS, JSX
- **Technologies:** Multisim, Intel Quartus, Simulink, CodeWarrior, ReactJS, Node.js, Git, Microsoft Office, G Suite

PROJECTS:

Linear Voltage-Controlled Frequency Function Generator - *October 2022*   **Project Link**

- Designed and crafted a device capable of producing symmetrical triangular and square waves by employing a systematic approach that encompassed stages of circuit design analysis, Multisim simulation, and physical implementation on a breadboard.
- Incorporated two user-selectable frequency ranges: Range 1 (100 Hz - 4200 Hz) and Range 2 (20 Hz - 840 Hz), as well as user-controlled gain ranging from 0-4Vp providing flexibility in wave generation.
- Utilized unit testing methodologies to identify, troubleshoot and resolve issues within the circuit design and implementation. Employed bypass capacitor circuits to minimize noise and ensure stable performance.

Design of PID Controller for Servo Positioning Module - *March 2023*   **Project Link**

- Implemented a PID controller for a simulated and real-time DC servo motor to enhance the closed-loop response of the system to a square wave input, demonstrating expertise in control system design and optimization.
- Analyzed response specifications for both uncompensated and compensated systems, comparing rise time, settling time, maximum overshoot, and steady-state error to assess the effectiveness of the control strategies.
- Explored the effects of control parameters on system operation outside the nominal range, demonstrating a comprehensive understanding of system behavior in challenging conditions such as saturation and dead zone states.

Microcontroller Maze Solver - *November 2021*   **Project Link**

- Developed a robust microcontroller maze solver using assembly language, demonstrating expertise in low-level programming and control systems.
- Implemented comprehensive error handling and condition-based decision-making, enabling the robot to handle various scenarios such as collisions, reverse bumps, and periodic automatic turns.
- Demonstrated proficiency in utilizing timers and counters to synchronize robot actions, ensuring accurate timing for state updates, and turning maneuvers.

PROFESSIONAL EXPERIENCE:

Sheen For She Foundation - *Website*   **Toronto, Ontario**

Event Coordinator and Volunteer Leader   *Mar 2020 – Present*

- Actively contributed to the marketing efforts of Sheen for She Foundation, raising awareness about its services and initiatives.
- Played a vital role in planning and executing successful events, ensuring smooth logistics and effective implementation.
- Developed strong leadership skills by effectively managing and coordinating volunteers and engaging with clients in a compassionate and empathetic manner.
- Effectively communicated the mission and impact of Sheen for She Foundation to stakeholders and the community, fostering a greater understanding and support for the organization's goals.

Toronto Metropolitan University Recreation- *Website*   **Toronto, Ontario**

Drop-in Strategist & Supervisor   *Sept 2023 – Present*
- Utilized strategic analysis and metric tracking to optimize the Drop-In program, enhancing participation rates and student benefits.
- As a committed supervisor, ensured the safety and inclusivity of daily drop-in sessions and special events, taking the lead in promptly addressing injuries and managing various emergent situations.
- Acted as a university ambassador, delivering exceptional support to clients during special events.