ARAS SIDDIQUI

Automation Engineer

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Skills & Tools

- Proficient in programming PLC (Allen Bradley) using **RSlogix 5000.** Additional tools: **DeviceNet**, **ControlNet** & **Ethernet**.
- Proficient in MATLAB(**Simulink**), **VB.net**, **C++, Java**, **Assembly** and **LABVIEW**.
- Designed 3D mechanical designs using **Autodesk Fusion 360, AutoCAD, Solid edge and Solid works.**
- Rapid prototyping experience using Microcontrollers (**Arduino**, **PIC 16F690**).
- Experienced in PCB design, milling and etching. PCB design using **EagleCAD.**
- Trained in machine shop tools like: **Lathe**, **Bandsaw**, **Drill press** and **Vertical Saw**.
- Proficient with MS office such as: Word, Excel, Power point, outlook and **project**.

Education

Bachelor of Technology - Automation | *McMaster University, Hamilton, ON*

September 2016- December 2020

- In a Joint program by McMaster University and Mohawk Collage.

Extra-Curricular

FIRST Robotics Team Captain (Mechanical & Electrical lead)

- Built robot in six weeks and competed in Oshawa regional. Oversaw fabricating robot chassis and the electrical wiring on robot.

Mentor for YMCA NYLD Program

- Mentor for YMCA's NYLD (Newcomer Youth Leadership and Development) program. Organized and led youth-based event.

Experience

Co-Founder, UX Designer | *Shuttlr , Hamilton, ON*

March 2017- September 2017

- Co-founded transportation startup to run shuttle service in areas that are underserved by public transport in Hamilton.
- Won 1st place in HackTheCity Case competition.
- Secured partnership with Forge (McMaster Startup incubator).
- Used Agile Project Management to manage team of 3.
- Designed UX/UI for mobile app in Adobe experience design.
- Reached out to over **100** people to determine target market.

B.Tech. Representative | *McMaster Engineering Society, Hamilton, ON.*

February 2018 – Present

- Increased community engagement by **60%** this year. Ran 5 events with **150+** in attendance. Including Alumni Night
- Secured funding of **$9,000** for B.Tech department designed for a composite 3D printer.
- Facilitated communication between Alumni, students and department. Informed all on current events and opportunities.

Projects

Self-Balancing Robot

- Created using 6DOF accelerometer and Arduino UNO. Robot can maintain its vertical position, when tipped over its axis.

Mechanical Oscilloscope

- Using a function generator, speaker and laser pointer, a sine wave can be observed from the vibrations created by speaker.

Automated Car Parking System (SCADA Project)

- An automated car parking solution that reduces parking space. System uses arduino & displays results on HMI(LABVIEW).

PWM and PID control using PLC

- Controlled analog output using PWM and PID and integrated system with an HMI.