

# Sami Ibn Jamil

Toronto, Ontario, M3J 3R9

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## Personal Profile

Highly skilled and resourceful Electrical Engineer with a superb work ethic and engineering research background. Strong multitasker able to handle simultaneous electrical design and repair tasks with full accuracy and efficiency. Interested in R&D, Robotics, Embedded Systems, Automation & IoT).

## Skills

<b>Programming</b>	Ladder Logic, Python (Pandas, PyTorch, NumPy etc.), Verilog (VHDL), Java, C/C++, HTML/CSS, JavaScript, SQL.
<b>Engineering</b>	PLC, Electrical Design, Auto CAD, 3D- Printing, MATLAB, Cadence, Altium, PCB Design, Debugging, PSim, Analog Circuit.
<b>Industry</b>	Scada, FPGA, RTOS, ROS, Ansible, Docker, MQTT Request, Circuit Analysis, Linux, Shell (Bash/Zsh), Firebase, Git.
<b>Soft Skills</b>	Leadership, Testing, Data Collection, Time Management, Teamwork, Problem-solving, Documentation, Engaging Presentation.
<b>Certification</b>	Laser Safety , WHMIS, 60 WPM certificate (Ratatype), Embedded Systems-Bare metal programming (Udemy).

## Work Experience

### Technical Support Engineer

Guelph, ON

Connect Tech Inc.

June, 2023 - Present

- Provided timely and effective first-line assistance to external engineers and technical customers. Leveraged experience with embedded systems, including NVIDIA Jetson, GPUs, Arduino, and Pi, to address their needs.
- Utilized cutting-edge technology tools, including integrated development environments and high-bandwidth oscilloscopes, to solve complex problems. Applied low-level C programming skills, device driver familiarity, and kernel modifications where necessary.
- Configured, tested, and replicated customer hardware, software, networking, and application issues. Conducted thorough quality assurance on prototypes across various operating systems and test environments.
- Collaborated with hardware, software, and mechanical engineering teams to resolve issues and contribute to design development. This included the ability to read electronic schematics.

### Linux System Administrator

Toronto, ON

Faculty of Science, York University

Sept, 2021 - June, 2023

- Assist with the support of classroom technology, servers and computer labs.
- Writes scripts for automation using Ansible to streamline tasks and improve efficiency.
- Deploys, Documents, tracks, and maintains computers, Linux servers and A/V equipment's.
- Manages and supports Linux servers, software applications, security, and network configuration.
- Provides technical support, Troubleshoots and resolves hardware and software issues for workstations and networks.
- **Technical Skills:** Ansible, Docker, Linux, ITSM, Wireshark, Microsoft SCCM, PowerShell, VBScript, MS Office Suite & Python.

### Facility Assistant (3D Printing/ Laser Cutting Lab)

Toronto, ON, Canada

Lassonde School of Engineering, York University

June, 2019 - Feb, 2021

- Held seminars and educated students about 3D modeling using Solid Works.
- Setup and Optimize Vector files for optimal Laser cutting, Reduced waste materials by 40%.
- Designed, calibrated, optimized 3D Models. Helped to reduce at least 30% of filament required.
- Managed, diagnosed and troubleshoot multiple 3D printers, Laser Cutters. Improved 3D printer run time by 25%.

## Projects

### 5 D.O.F. Robot ARM

Toronto, ON, Canada

Personal Project

Sept, 2023 - Present

- Made the arm do regular task like pick and place objects. Improved accuracy by 60%.
- 3d Printed, Configured, tested and assembled the arm, also used a microcontroller and motor driver to control it.
- **Technical Skills:** Mechatronics, C/C++, Arduino, ROS, Forward/Inverse Kinematics, Automation, Drivers, & Python.
- **Soft Skills:** Arduino, Software Testing, Fixing bugs , Design analysis, Optimization, Teamwork, Presentation skills, Report writing.

### Power Monitoring Device (IoT, Mesh System)

Toronto, ON, Canada

Engineering Capstone Project

April 2022

- Worked with Arduino, Raspberry Pi and other ARM Cortex-M based Microcontroller to reduce processing times by 50%.
- Analysed data and discovered pattern in the data that show Power usage trends. Optimized Power consumption by 10%.
- Interfaced with hardware and sensors using communication protocols like I2C, UART and SPI, Improving Data accuracy and stability by 30%.
- **Technical Skills:** PWM, FFT, LPF C/C++, ADC, DAC, Data Structure , 3D Design, Engineering analysis, PCB Design , Power supply optimization.

## Education

### Lassonde School of Engineering, York University

Toronto, ON, Canada

B.Eng in Electrical Engineering

Sept, 2017 - April, 2022

- Computer Science (minor)
- Interested in Robotics & Automation