Arun. Cheriakara

Electrical Engineer · Programmer

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Education

University of Ottawa — *Ottawa, Ontario*

BASc in Electrical Engineering — *Sept. 2018 - April. 2023*

- Dean's honour list with a GPA of 3.9/4.0
- Undergraduate courses: Introduction to Data Communications and Networking, Digital Signal Processing, Wireless Communication, Electronics

Skills

Programming	Python, C/C++, Embedded C, Jupyter, Pandas, HTML, CSS, JavaScript, Node.js, MATLAB, Assembly
Software	Git, JIRA, Confluence, Agile, Multisim, EagleCAD
Experience	Schematic And Circuit design, PCB Design, SPI, I2C, Micro-controller

Experience

Innovation, Science and Economic Development Canada — *Ottawa, Ontario*

Telecommunication Engineer — *May. 2022 - Aug. 2022*

- Collecting data and scripting solutions using Python and MATLAB
- Reviewing and verifying licensing of space stations such as TELESAT and SES
- Calculating Antenna gains and Losses throughout different satellites and verifying them
- Antenna matching, tuning, measurements, and spectrum analysis
- Understand the fundamental of radio communications protocol and how different frequency bands in Canada operate

Curtiss-Wright — *Ottawa, Ontario*

Hardware Designer — *Sep. 2021 - Dec. 2021*

- Used High-speed logic analyzers and digital oscilloscopes in the lab for testing and verification
- Test and debug of high-speed signals during an initial bring-up phase
- Develop scripts using TeraTerm, Python, C/C++ languages to verify the hardware
- Working knowledge of TPM, I2C and SPI bus cycle and how to implement a solution to the hardware
- Performed schematic design and work with the CAD team on PCB layout
- Gained knowledge in using JIRA and Confluence

Arkalumen — *Ottawa, Ontario*

Hardware Designer — *Jan. 2021 - May. 2021*

- Worked under senior electrical engineers to design PCB's and designed multiple PCB's throughout the term
- Obtain a solid understanding of embedded application development by learning Assembly
- Able to translate Assembly to C programming and verify it by uploading to the hardware

University of Ottawa — *Ottawa, Ontario*

Hardware builder for BT Beacon technology — *May. 2020 - Sep. 2020*

- Designed a functional Hardware/Software that is able to measure the distance between two devices for Social distancing (Covid-19)
- Implemented commands using Embedded C programming for the Bluetooth chip
- Excellent working knowledge in C++
- Developed several tests to verify the compatibility of the hardware (smoke test, robustness test

Projects

Remote Control of Robotic Arm — *Ottawa, Ontario*

Core Member — *Jan. 2021 - PRESENT*

- Built a robotic arm that is remote controlled through a glove
- Used Web sockets to establish a client/server connection to control the arm through JavaScript
- Parsed the data coming from glove into JSON format so the arm can receive the incoming data remotely