

Bryan Melanson

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EDUCATION

MEMORIAL UNIVERSITY
BS IN COMPUTER ENGINEERING
 May 2020 | St. John's, NL

LINKS

Github:// [bryan-melanson](#)
 LinkedIn:// [bryanmelanson](#)
 StackOverflow:// [bryan-melanson](#)

COURSEWORK

Undergraduate
 Real Time Operating Systems
 Embedded Systems
 Software Design
 Data Structures
 Image Processing
 Computer Security

SKILLS

Languages
 C/C++ • Java • JavaScript • Fortran
 Python • \LaTeX • R • Rust
Software
 Vagrant • MongoDB • MySQL • CMake
 Matlab • FreeRTOS • JIRA • Unity
 CircleCI • GDB • Docker
Hardware
 ESP32 • JTAG • Bluetooth • NFC • I²C
 SPI • UART • PWM • ARM • Arduino

INTERESTS

Powerlifting
 Sound Design
 Woodworking
 Machine Learning

EXPERIENCE

MYSA SMART THERMOSTAT | JUNIOR EMBEDDED DEVELOPER

Jan 2019 - Present | St. John's, NL

- Designing, developing, coding, testing and debugging firmware for embedded devices and systems from requirements to production and commercial deployment.
- Working with the hardware team to specify and develop new products from prototype through to production.
- Working with the software team to develop API and interface specifications for embedded devices.
- Integrating and validating new product designs.

SIA | SOFTWARE DEVELOPER

May 2019 – May 2020 | St. John's, NL

- Developed customized real-time location system (RTLS) software solutions for health care organizations to track assets, increase visibility, identify risks and solve work flow problems in clinical environments.
- Designed MVP including web architecture and hardware solutions.

MUN SAILBOT | SOFTWARE DEVELOPER

May 2016 – Sep 2018 | St. John's, NL

- Worked on the design and programming of an automated 2.2 meter sailboat to compete in the annual **International Robotic Sailing Regatta**.
- Created algorithms for wind based sail navigation and GPS navigation.
- Competitions include remote control racing, machine vision, automated navigation, collision avoidance and load delivery.
- Developed hardware solutions for sensor, motor, and controller selection using protocols such as UART, I²C, SPI and PWM.

WORK TERMS

NOKIA INC. | TIER 2 SUPPORT ENGINEER

Sept 2016 – Jan 2017 | Ottawa, ON

Worked with Nokia **5620 SAM** clients debugging complex product installations on CentOS/Solaris/RHEL systems as well as resolving large-scale network management issues using Open Stack and VMWare.

NALCOR ENERGY | SOFTWARE DEVELOPER

Dec 2015 – May 2016 | St. John's, NL

Lead the development of interactive heat map Geographic Image System (GIS) application for analyzing and visualizing real time prices of the New York state energy market using MATLAB, and SQL. Expanded project scope to include scripted mapping of all major Canadian energy markets using R.

AWARDS

2018 SIA chosen for Propel ICT Incite Accelerator Program