

(709) 746-7582
sam@samanthony.xyz

Sam Anthony

Montréal, QC, Canada
www.samanthony.xyz

Education

June 2026	Concordia University	Montréal, QC
	<ul style="list-style-type: none">• Bachelor of Computer Science.• GPA: 4.02 out of 4.30.• Dean's list, 2024 & 2025.	

Employment

Summer 2025	C-CORE, software developer intern	St. John's, NL
	<ul style="list-style-type: none">• Developed software for the MUNStar-1 Cube-Satellite's MCS, ADCS, C&DH, and simulation systems.• Wrote and tested MISRA-compliant C firmware with FreeRTOS for the Zynq 7000 SoC.• Implemented reliable ADCS communication protocol over CAN. Modified C preprocessor to generate (de)serialization code for ADCS datastructures. Tested in cleanroom.• Wrote test framework code generator to produce PlantUML statechart from list of system tests.• Built redundant storage firmware module with integrity checking.• Unit-tested simulation system, and extended it to include filesystem.• Used GNU Radio to assist in revamping GFSK radio flowgraph.	

Projects

git.samanthony.xyz

Automotive gauge driver with CAN interface

- Designed hardware (PCB) with PIC microcontroller, MCP2515 CAN controller, EEPROM, and DACs.
- SPI for inter-chip communication.
- C firmware, Go calibration software, Python bit-timing script.

Volute

- Graphical turbocharger selection program.
- Thermodynamic model of internal combustion engine and compressor.
- Written in C using microui.

Skills

Programming in Ada, C, C++, Go, Java, Python.

Embedded systems design and programming with PIC, STM32, ESP32 microcontrollers; Zynq 7000 SoC; FreeRTOS; state machines.

Concurrent programming with threads, Open MPI, Go, Ada, FreeRTOS. Parallel programming with OpenMP, TBB, OpenCL.

Networking – TCP/UDP/IP, 9P, CAN, RS-485, SPI, I²C.