

# Austin Bodzas

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## OBJECTIVE

### JANUARY - AUGUST 2018

To obtain a cooperative education position as a Software Engineer and to expand experience in software development.

## EDUCATION

**RARITAN VALLEY COMMUNITY COLLEGE** | AS COMPUTER SCIENCE      Branchburg, NJ | December 2015  
GPA: 3.75

**ROCHESTER INSTITUTE OF TECHNOLOGY** | BS COMPUTER SCIENCE      Rochester, NY | December 2018  
GPA: 3.7

Courses: Mechanics of Programming, Concepts of Parallel and Distributed Systems, Intro to Computer Science Theory, Intro to Software Engineering, Intro to Algorithms, Programming Language Concepts, Professional Communications, Principles of Data Management

## EXPERIENCE

### L3 TECHNOLOGIES GCS | SOFTWARE ENGINEER CO-OP

Victor, NY | January 2017 – August 2017

- Developed embedded software in C for AVR devices
- Gained experience in C++ development for embedded Linux
- Worked in-depth with serial communication
- Created driver interfaces to ancillary hardware

## SKILLS

LANGUAGES	C++, C, Python, Java, $\text{\LaTeX}$ , JavaScript
OPERATING SYSTEMS	Linux (Arch, Ubuntu), OSX, Windows
SOFTWARE	SVN, Git, CMake, GNU coreutils, Make, FreeRTOS
MISC	SPI, I <sup>2</sup> C, Serial, Oscilloscope operation

## PROJECTS

### TEAM LEAD FOR RIT SPACE EXPLORATION CUBESAT AVIONICS: FALL 2016 - SPRING 2017

Worked as Team Lead for the Avionics subsystem for the RIT Space Exploration student faculty research group (SPEX). Was responsible for keeping the team on track for planning, designing, and developing software that runs the main computer onboard the cube satellite. The Avionic team's task was to research the hardware and software necessary to control a Cube Satellite in orbit and complete a scientific mission. Gained knowledge on technologies such as Real Time operating systems along with the increased challenge of computation in a space environment.

### HIGH ALTITUDE BALLOON (HAB) TELEMETRY

Designed and developed telemetry software for SPEX HAB's December 2016 launch. Functionalities of the software were to log atmospheric pressure, temperature, acceleration, rotation, and magnetic data to an SD card. The project was written in C++, connecting to various sensors over serial bus protocols, SPI and I<sup>2</sup>C. Analysis of the recovered telemetry data proved critical to diagnosing a mid-flight mechanical failure.

## CURRENT PROJECTS

### SPACE DYNAMICS LABORATORY PAYLOAD CHALLENGE

SPEX is designing the payload, Hyperion, to serve as a rocket black box. Hyperion will also have protective fabric landing airbags, similar in concept to those of older Mars rovers. Personal focus for this project involves computational hardware and sensor selection, as well as software design.

### PROJECT LEAD FOR MICROHAB

Goals are to minimize the cost and integration time for High Altitude Balloon projects. Roles involved are organizing a multidisciplinary team and educating members on embedded software development.