Austin Bodzas

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OBJECTIVE

FULL-TIME To advance the state of planetary exploration through the development of innovative embedded software. Available Summer of 2019.

EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY | BS COMPUTER SCIENCE Rochester, NY | May 2019

GPA: 3.7

RARITAN VALLEY COMMUNITY COLLEGE | AS COMPUTER SCIENCE Branchburg, NJ | Dec 2016

GPA: 3.75

SKILLS

PROGRAMMING LANGUAGES	C, C++, Python, Java, Bash, LaTeX
SOFTWARE	Git, Docker, NASA cFE, Ball Aerospace Cosmos, Bamboo Automated Testing

EXPERIENCE

L3 GLOBAL COMMUNICATIONS SOLUTIONS SOFTWARE ENGINEER CO-OP

Victor, NY | Jan 2017 – Aug 2017

VSAT Ground Stations

- 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

JOHNS HOPKINS APPLIED PHYSICS LABORATORY SOFTWARE ENGINEER CO-OP

Laurel, MD | Jan 2018 – Present

NASA DART - Double Asteroid Redeflection Test Mission

- Wrote flight software utilizing NASA Core Flight Executive.
- Adapted Ball Aerospace Cosmos to work with DART's command and data handling system.
- Leveraged code reuse by porting over software from Parker Solar Probe for DART.
- Worked on DART's software testbed developing in C++, also utilizing NASA cFE.

Software in the Loop Environment for Testing Flight Software (SWIL)

- Created adapters to relay SpaceWire traffic over UDP for testbed and flight software.
- Utilised Docker to develope an environment that increased frequency of testing by a factor of four.
- Enabled developers to rapidly implement features and test on dev machines
- JHU APL Explorer Award granted to DART team for bringing modern software practices to space.
- Attended Dockercon SF, work on SWIL was presented to the main audience.

Deep Learning for Space – Internal Research and Development (IRAD)

- Ported over flight software to run on an arm64 Jetson TX2 running Ubuntu
- Developed NASA cFE application to integrate with an image classifier and telemeter classifications
- Implemented ground softare to process incoming data and display on an OpenLayer map using web technology.

INVOLVEMENT

RIT Space Exploration (SPEX) Member Jan 2016 - Present

- Avionics team lead for Cubesat Launch Initiative proposal.
- Wrote software for SPEX's Hight Altitude Balloon 3 integrating with various sensors.
- Explored potential cubesat payload for testing new memory technologies.

RIT SPEX Admin - Technical Coordinator June 2018 - Present

- Interact with all the project teams in a managerial role.
- Ensure teams have direction needed to achieve objectives.
- Act as technical bridge between admins and project members.