

# James Bocinsky

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**Summary:** Masters student with 2+ years of experience in machine learning algorithm development on landmine datasets and multiple internships with Harris Corporation. Skilled in machine learning, embedded systems, statistics, problem solving, and programming. Graduating May 2019. Applying for full time positions.

## Work Experience

**Machine Learning and Sensing Lab** – Graduate/Undergraduate Research Assistant (November 2016 - present)

- Designed, developed, and tested a multiple instance algorithm for sub-surface landmine detection through preprocessing, feature extraction, algorithm development, and testing of electromagnetic induction data
- Designed and instructed 11 of 12 Intro to Machine Learning lectures for incoming freshman at the University of Florida

**Harris Corporation** – Embedded Software Engineering Internship (May – Aug 2017)

- Developed embedded software on the T7 robot, designed to assist in explosive ordinance disposal (EOD) missions
- Prototyped a multicast communication protocol on a microcontroller to be used across the robot's control systems
- Implemented and tested a smart battery status controller area network (CAN) messaging protocol

**Harris Corporation** – Software Engineering Internship (May – Aug 2016)

- Developed Java software for the FAA that established data exchange between airplanes and towers
- Created a thread pool executor to handle a high throughput of producer/consumer messages
- Set up framework for a knowledge base system on a closed network server using Linux, Apache, Postgres, and PHP

## Education

**M.S. in Computer Engineering | Thesis | University of Florida | Graduating May 2019 | 3.76 GPA**

- Coursework: Machine Learning, Biometrics, Big Data, Dig. Signal Processing, Image Proc. and Comp. Vision, Time Series Analysis

**B.S. in Computer Engineering | University of Florida | Dec 2017 | Cum Laude | 3.76 GPA**

- Senior Project – Developed and built an autonomous face detecting turret
- Senior Project – Designed and implemented a standalone sunrise simulating alarm clock

**West Shore Jr/Sr High School | 4.00 (4.40 weighted) GPA | Valedictorian**

- Worked diligently and efficiently at a national blue-ribbon school, rated top 50 in the United States, and #1 in Florida (2013)

## Skills & Abilities

### Tech Skills

- Machine Learning, Python, Matlab, Java, C, C++, Assembly, Linux, Shell scripting, Lua scripting, and Makefiles
- Agile Development, Git, SVN, Logic & Digital Design (VHDL), PCB Design, Embedded Systems, and SolidWorks Certified

### Management and Leadership

- Outreach Coordinator – Machine Learning and Sensing Lab (August 2017 – present)
- Website manager, exec board member, and player of the University of Florida Men's Club Soccer Team (2013 – 2017)
- Captain of high school state champion soccer team (January 2013)

### Special Interests

- Soccer, golf, football, tennis, guitar, modifying my car, motorcycles, building computers, and tinkering with electronics
- SwampHacks – 24 hour hackathon where programmers come together to create an innovative project (2016, 2017, 2019)
- Active Club Member – IEEE, HKN, UFAI, ACE