# Erik Bøsen

me@erikboesen.com / erikboesen.com / github.com/ErikBoesen / linkedin.com/in/erikboesen / (571) 733-7845

### Education

2019-2023

Yale University, Accelerated BS & MS degree in Computer Science. Yale Undergraduate Aerospace Association CubeSat team, Yale Computing Society, Y-IEEE, Yale Record. New Haven, CT

# Experience

SCHOOLOGY / Software Engineering Intern

- Hired as youngest ever intern after creating browser extension to overhaul graphics & add features to web app
- Revamped NodeJS dependency management, implementing Snyk and Yarn for security checks
- Navigated Agile team, including running the team standup
- Built new interface features using PHP for standards-based grading on enterprise-grade web app with over 20 million users

MIT Marine Autonomy Lab / Research Intern

- Executed aquatic human-robot interaction experiments using voice-controlled semiautonomous aquatic robots
- Created biometric datasets for DARPA, Battelle, and other lab sponsors
- Built autonomous driving software with C++ and emotion tracking in Python
- Added camera management system to lab's popular MOOS-IvP autonomy framework
- Completed graduate-level MIT 2.680 coursework during internship

VIRGINIA GENERAL ASSEMBLY / Intern, Office of Delegate Kathy Tran

- Performed preliminary research, helped in drafting, and testified in support of HB1111, which proposed STEM Education Fund for supporting technology education programs at underserved high schools.

2016-2019

2018

2018

VEKTRE LABS / Founder & Director / Built/maintained modern websites for local companies and nonprofits including English Now!, Tinner Hill Heritage Foundation, Welcoming Falls Church, Falls Church Village Preservation and Improvement Society, Washington Center for International Education, and others. Delegated work to younger students upon graduation.

# **Projects**

2016- OPEN SOURCE / >300 repositories, >10,000 commits. See github.com/ErikBoesen, github.com/frc1418

- MeBots, Python web app (Flask and Postgres) to wrap the GroupMe API for bot management
- Yale Menus, an Android/iOS app for dining at Yale used by a majority of student body
- Wristcoach, an embedded C app on Pebble watch (FreeRTOS) platform for assisting robot drivers

2015-2019

FIRST TEAM 1418 / President, Programming Captain / Wrote code in Python, web languages, Go, Ruby for robot control in large student organization. Created platforms for sophisticated data analysis with NodeJS, and led team to establish inclusive leadership structure and outreach programs spanning multiple countries.

2017-2018

MASONHACKS / Founder & Director / Created GMHS' first "hackathon" programming competition. Raised \$2,500 in corporate sponsorship.

2016-2019

CYBERPATRIOT / Captain, Team 10-1018 & Team 11-1091 / Competed in national cybersecurity championship. Directed school's program and taught programming lessons on Bash scripting to other competitors.

### Awards

2018

FIRST Dean's List / One of ten students (from 92,000 eligible) who received the highest student award in the FIRST Robotics Competition.

2017

US CONGRESSIONAL APP CHALLENGE WINNER / Won US Congress challenge for creation of Opinr, a web application exposing users to diverse political perspectives paired with a social network for open discussion.

2016-2018

FIRST INNOVATION IN CONTROL AWARD / Won for creation of open-source FRC Dashboard platform, now used by over 100 robotics teams for advanced, customizable robot control.

#### SKILLS

Proficient

Python, HTML/CSS/JS, C/C++, Java, Ruby, UNIX, ŁĄĘX, PHP

Familiar

Go, Perl, Lisp, Batch