

# John Bensen

Garden City, NY 11530 • [jbensen@purdue.edu](mailto:jbensen@purdue.edu) • (516)-497-9872

## EDUCATION

---

Purdue University - West Lafayette, IN

May 2023

*Bachelor of Science in Computer Engineering, Minor in Economics*

GPA: 3.57/4.00

Relevant Coursework:

- Completed: Python for Data Science, Advanced C, C Programming, Elementary Linear Algebra
- Currently Enrolled in: Data Structures, Introduction to Digital System Design

## PROJECTS AND RELEVANT EXPERIENCE

---

Reusable Rocketry - *Team Member*

Feb 2021 - Present

- Working on a team to build a model rocket that is able to land itself, currently on the electronics subteam
- Implementing a PID controller that controls the gimbal to correct for errors in the rocket's orientation
- Developing a Kalman filter that will combine the predicted state with magnetometer and gyroscope measurements to estimate the rocket's current state, allowing for more a more effective controls algorithm

Spacecraft GN&C Project- *Software Lead*

March 2020 - August 2020

- Worked on a team to develop a closed-loop rocket guidance software that consistently landed a reusable rocket in a rocket simulation
- Formulated a computer-solvable convex optimization problem from the physical constraints, equations of motion, and desired outcomes that are involved with rocket landing guidance

App Development - *Lead Developer*

August 2020 - Present

- Working on a social media app that is being designed to prioritize the mental health of its users
- Designed and developed a web server, using Python, Django, and Google Cloud Platform, that is responsible for efficiently storing and retrieving data relevant to a user's experience
- Currently developing the frontend of the app with Flutter and Dart, focusing on effective state management with provider and using best practices to make the code clean and readable
- Working with a designer to create a clean and minimalist user interface while making the user experience as intuitive as possible

## SKILLS

---

- Languages: Proficient in Python, C, Dart, and Flutter - Comfortable with Java, C++, Matlab, HTML, CSS, Javascript
- Software Technologies: Linux, Django, Tensorflow, Numpy, git, Google Cloud Platform, Google Firestore, CVXPY, Google Firestore

## WORK EXPERIENCE

---

Leo's Restaurant - *Busboy*

2016 - 2020

- Focused on turning over tables while also assisting the rest of the staff with a variety of task
- Effectively communicated with co-workers in high stress situations

