

# JONATHAN OPPENHEIMER

610 North Oak Street  
Falls Church, VA 22046  
(703) 362-0215

[joppenhe@purdue.edu](mailto:joppenhe@purdue.edu) • [github.com/JonathanOppenheimer](https://github.com/JonathanOppenheimer) • [linkedin.com/in/jonathan-oppenheimer/](https://linkedin.com/in/jonathan-oppenheimer/)

## EDUCATION

### **Purdue University – College of Science**

*Bachelor of Science in Computer Science, Minor in Political Science*

**West Lafayette, IN**

*August 2021 – December 2024*

- Cumulative GPA: 3.88/4.00, Dean's List, 2x Semester Honors
- Relevant Coursework: Data Structures and Algorithms\*, Computer Architecture\*, Programming in C, Discrete Mathematics, Problem Solving and Object-Oriented Programming, Data Science Labs: Calculus (\*currently enrolled)
- Activities and Societies: Hack the Future, CERIAS, Purdue Outing Club

## WORK EXPERIENCE

### **Space Ground System Solutions – Rapid Delivery/Antenna Services Team**

*Software Engineer Intern*

**Alexandria, VA**

*June 2022 – August 2022*

- Served on an Agile team to produce synchronous client/server software packages for a remote ground antenna supporting ADS-B aircraft data, and NOAA polar orbiter satellite data from ground up; finished product spanned 10k+ LOC
- Implemented all client-server communications and complete command and control of antenna with NASA's GMSEC message architecture; achieved sub 100ms response times for 1500+ mile high-frequency message exchanges
- Wrote wrappers and documentation for 2 new message formats: GPS data, and antenna pointing angle transfer
- Developed custom driver for serial communications to an antenna rotator for remote, manual user control, and real-time satellite tracks

### **Glass House Recycling LLC**

*Founder/CEO*

**Falls Church, VA**

*February 2020 – Present (remote)*

- Founded curbside glass-pickup business with brother at age 17 to meet demand after Falls Church City stopped providing municipal glass recycling service, later incorporated, set up customer accounts and mailing/billing with limited reliance on third-party services
- Leveraged digital advertising and media (NBC, WAMU, NowThis) to grow customer base to over 100 residential households
- Administered all business enterprises including expansion into commercial space, winning 'Best of Falls Church' award in second year

### **Mary Riley Styles Public Library**

*Page*

**Falls Church, VA**

*January 2019 – March 2020*

- Assisted patrons, shelved, checked in, and cataloged books, and supported full-time staff
- Stellar half-year performance review

## PROJECTS

### **Leadership Lafayette Storyboard – Hack the Future**

*React, Node.js, Mongoose*

**West Lafayette, IN**

*October 2021 – April 2022*

- Developed an all-in-one testimonial submission tool for a local nonprofit, Leadership Lafayette, on a team of 8 working in an Agile environment throughout academic year. Site entered production in April 2022
- Converted design documents into client-facing testimony submission page, assisted with administrator dashboard development

### **My CS Plan – Hello World Hackathon**

*Next.js, Flask*

**West Lafayette, IN**

*September 2021*

- Collaborated on a 4-person team during Purdue's 2021 Hello World Hackathon to create a web app that returned a minimum listing of classes to achieve multiple Purdue CS concentrations, given 2 user choices
- Designed and implemented front-end webpage, and interfaced with flask backend, making HTTP requests with user-selected tracks to fetch and display optimized course listings

### **Mustang Mug**

*Svelte, Node.js, Google Firebase*

**Falls Church, VA**

*April 2021 – August 2021*

- Shared leadership of a team that designed, built, and deployed an online ordering web application for my high school's café, replacing a staff-intensive and inefficient Google form ordering system
- Used MySchoolBucks' API to provide payment options, and report sales to school's existing platform, hosted application on Firebase
- Included a user-facing store that wraps the MySchoolBucks point of sale system and an administrator dashboard for complete configuration of the store's hours and menu
- Wrote user documentation for students and school staff, and technical documentation for future student maintainers

## OTHER INFORMATION

*Languages:*

Java, Python, C, HTML/CSS/JS, LaTeX, shell scripting (bash/sh)

*Tools/Environments:*

Git, GitHub/GitLab, Unix (RHEL 7/8, Raspbian, etc.), various web frameworks

*Awards:*

Eagle Scout, Purdue Department of Computer Science *Kunze* Scholarship

*Certifications:*

Active 'Secret' level security clearance, Purdue College of Science Intercultural Teamwork Certificate, NOCTI Computer Programming, NOCTI Advertising and Design