Joonho Jonathan Oh

jonathan.oh@emory.edu | LinkedIn | joonhoswe.com | CitHub | +1 (614) 949-4702

EDUCATION

Emory UniversityB.S. in Quantitative Sciences, Computer Science, and Pre-Law
May 2026

- GPA: 3.93
- **Relevant Coursework:** Data Structures and Algorithms, Computer Science Practicum, Discrete Mathematics, Java Programming, C++ for Engineers and Scientists, Calculus I & II, Calculus-Based Physics.
- Extracurriculars: Varsity Track and Field, Computer Science Club (VP), M||E Competitive Programming, Data Science Club, and Korean Undergraduate Students Association.

PROFESSIONAL EXPERIENCE

Johnson & Johnson Cincinnati, OH

Software Engineer Intern

June 2022 - July 2023

- Wrote 12 Python scripts to autonomously test a surgical robotic arm's transient response to a step input.
- Developed **broadband tests** to get the robotic arm's frequency response to excitation signals and generated Bode, Nyquist, and Nichols Diagrams representing these frequency responses.
- Tuned an Independent Stack Manipulator (ISM) to dynamic models mimicking a robotic arm's movement.
- Developed **efficient Python data type validation scripts** and **conversion tools** for the Eevee Data Visualization Tool, used to generate dynamic models and graphs from transection data of surgical cutters and staplers.
- Optimized existing data validation algorithm run time by 60.86% using Pandas' vectorized data conversion and analysis tools.
- Received Inspire Award for outstanding contributions to the Robotics team

The Ohio State University

Columbus, OH

Undergraduate Teaching Assistant

August 2022 – May 2023

- Hired as a high schooler to lead 200 undergraduates in Data Structures & Algorithms and Java Programming.
- Collaborated with the professor to lead weekly labs, hold office hours 2x/week, and grade assignments.

PROJECTS

Angel Trading Company April 2024

- Spearheaded the Front End Development of a trading, selling, and buying platform for Smiski and Sonny Angels.
- Led a team of 6 students as Scrum Master with daily stand-ups, weekly sprint planning, and sprint reviews.
- Automated production and testing builds for the backend and frontend via a CI/CD pipeline using GitHub actions.
- Utilizes: React + Vite for frontend, Django for backend, S3 with Postgres for storage, and Clerk for User Auth.

SWEdle January 2024

- Full-Stack web game to guess and refine knowledge of various programming terms based off Wordle
- Utilizes: React, JavaScript, MongoDB, HTML5, TailwindCSS, and Deployed on Netlify and Fly.io

StockBot December 2023

- Discord Bot that stores a watchlist of stocks and sends frequent updates on price changes/profits/losses.
- Utilizes: Python, Pandas, Discord API, and Alpha Vantage API

SKILLS

- Languages: Java, Python, C++, C, JavaScript, HTML5, and CSS
- Libraries / Frameworks: Pandas, NumPy, SciPy, Django, MongoDB, Node, Express, React, and Tailwind CSS
- Technical Skills: Data Analysis, Agile/Scrum, Microsoft Office, and Git