JOANNA LIN

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY **Expected May 2025**
Bachelor of Science in Computer Science, GPA: 3.37
Minors: Operations Research and Management Science, Data Science

Relevant coursework: Analysis of Algorithms, Machine Learning, Database Systems, Foundations of Robotics, Operating Systems, Optimization I & II, Computer Systems, Discrete Structures, Object-Oriented Programming

WORK EXPERIENCE

Procter & Gamble, *Software Engineer Intern* **May. 2024 – Aug. 2024**

- Provided statistics regarding external software developers' efficacy and productivity across multiple GitHub repositories based on GitHub API data using Python, PostgreSQL, and React JavaScript
- Configured connections to GitHub's API to pull data for a specified GitHub repositories using various API endpoints with the Python Pydantic package
- Created PostgreSQL table schemas and populated tables using SQL query calls that simplified the GitHub API data based on the identified metrics related to pull requests, commits, and lines of code changed
- Developed UI components using AG Grid and ECharts, allowing users to sort, filter, and visualize data for specific GitHub repositories and the individual software developers within those repositories
- Transferred updated Python and PostgreSQL scripts to Airflow to enable automation and productionization

TE Connectivity, *Product Management Intern* **May. 2023 – Aug. 2023**

- Identified underutilized work centers across production plants and used data analytics to prioritize the obsoletion of high priority work centers, which would increase the automotive business by over 33%
- Conducted analysis of revenues, standard margins, and volumes across multiple automotive programs and identified key programs and products for expedited End of Life (EOL) status to prioritize focus and growth on more profitable programs and initiatives
- Established standardized guidelines and standard margins for the pricing team to increase efficiency and decrease processing times of pricing requests between the product management team and the pricing team
- Created and analyzed Product Lifecycle and Segmentation reports for various automotive sector product lines

Cornell University, *CS 1110 (Introduction to Computer Science – Python) Tutor* **Jan. 2024 – Present**

- Developed learning plans and resources for students, leading to enhanced student comprehension and increased confidence in Introductory Computer Science topics such as variables, loops, lists, and recursion

RELEVANT EXPERIENCE

Cornell University AutoBoat Project Team, *Full Team Lead (prev. Business Lead & Software AI Lead)* **Jan. 2022 - Present**

- Built and developed an autonomous robotic boat capable of complex path planning and decision making through custom algorithms and the use of computer vision for the annual international RoboBoat competition (previously placed as RoboBoat 2023 and RoboBoat 2024 competition finalist)
- Directed and managed team operations and logistics while also facilitating collaboration to ensure productivity throughout the entirety of the team's technical timeline which included code development, implementation, and testing through unit tests, simulation testing, and water testing
- Researched and developed complex path planning and decision-making algorithms in Python for the RoboBoat 2023 Speed Challenge task using the Pure Pursuit algorithm and computer visions inputs from the ZED2i camera
- Increased annual team budget by over 4x since 2022 through strategies including crowdfunding donations, Cornell Giving Day contributions, corporate sponsorships, and fundraising efforts

SPECIALIZED SKILLS

Programming Languages: Python, SQL, JavaScript, React, Java
Softwares and Programs: GitHub, GitHub API, PostgreSQL, AG Grid, ECharts, Tableau, AutoCAD, Autodesk Inventor, Microsoft Office Suite, Microsoft Excel