

EMMANUEL WILFORD

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EDUCATION

Yale University

B.S. Computer Science, B.A. Economics

August 2020 - Present

GPA: 3.5

Relevant Coursework: Data Structures, Databases, Algorithms, Artificial Intelligence, Econometrics, Software Engineering, Systems Programming & Computer Organization

WORK EXPERIENCE

Software Engineering Intern @ UT Southwestern

June 2023 - Present

- **Projects:** Developed an automated meta-analysis application for aiding in academic and medical research.
- **Contributions:** Engineered a Python backend to handle data acquisition, processing, and analysis. Implemented a user-friendly React frontend to take user queries and display relevant, research-backed answers and reputable sources.
- **Skills:** Python, ReactJS, Web Development, NLP, Data Analysis, User Interface Design

Software Engineering Intern @ General Motors

June 2023 - August 2023

- **Projects:** Engineered a cost-effective proof-of-concept testing tool for automotive software, designed for enhancement and future use in development cycles, significantly reducing potential operational expenses.
- **Contributions:** Leveraged the company framework to build Python feature files for the automotive testing process, reducing estimated costs from \$500 to \$30 per setup. Implemented unit testing to ensure the reliability and accuracy of the software. Demonstrated strong organizational skills.
- **Skills:** Python, Test Engineering, Cost Optimization, Enterprise Software Development, Git

Software Engineering Intern @ Yale Institute for Global Health

June 2022 - June 2023

- **Projects:** Development of ShotBot for vaccine-related queries, analysis tool for social media campaigns, and a key performance indicator dashboard for educational initiatives.
- **Contributions:** Sole software engineer developing and implementing a range of digital solutions in collaboration with medical researchers and global organizations such as UNICEF and Meta. Developed a flu vaccine hesitancy chatbot (ShotBot) using MERN stack, a campaign analysis app with natural language processing abilities for Facebook ad campaigns using Python, and a robust KPI dashboard with file upload functionality for an educational course using MERN stack.
- **Skills:** Python, MERN, Web Development, Data Analysis, NLP

Tobin Research Assistant @ Yale School of Management

Feb 2022 - August 2022

- **Projects:** Economic agent decision-making research project, focusing on the influence of prestige.
- **Contributions:** Utilized Python and data analysis libraries for data cleaning and trend identification. Scraped data from reliable sources. Delivered professional presentations of significant data findings. Facilitated the understanding of how prestige impacts economic decision-making.
- **Skills:** Python, Data Analysis, Data Cleaning, Web Scraping, Research, Data Presentation

Future Work Experience

Introduction to Databases ULA @ Yale University

September 2023 -

- **Expected Contributions:** Assist in teaching and guiding 70 students in an introductory course on database systems. Facilitate understanding of data modeling, the relational model, SQL query language, database implementation, and various other topics related to databases.

SKILLS

Languages

English (Fluent), Spanish (Advanced)

Programming

Python, JavaScript, SQL

Web Development

MERN Stack (MongoDB, Express.js, React, Node.js), HTML/CSS

Version Control

Git

Data Analysis

Data Cleaning, Web Scraping, Data Modeling, Database Design