

Education

Drexel University

Philadelphia, PA

Bachelor of Science in Chemical Engineering

- Cumulative GPA - 3.75
- Awarded the A.J. Drexel Scholarship for the academic years 2018 - 2021
- Received the Dean's List Award for my 9 academic terms from 2018 - 2021

Programming & Technical Skills

Languages: Python, Java, JavaScript/HTML/CSS, Bash, SQL, MATLAB**Frameworks & Libraries:** React, JQuery, Django, pytest, Bootstrap, Pandas, NumPy**Tools:** Git, Linux, npm**IDEs:** Visual Studio Code, Pycharm, IntelliJ, Eclipse, Jupyter Notebook

Work Experience

Drexel University

Philadelphia, PA

Research Assistant (Python, pytest)

January 2020 - May 2021

- Implemented a stock-driven dynamic material flow assessment to predict future waste production from solar panels
- Created unit tests cases to test and debug the complex algorithm to ensure it meets the model's requirements
- Wrote a supporting information document tailored to a non-technical audience or researchers, guiding them on the algorithm and how to run the model in Jupyter Notebook.

Philadelphia Water Department

Philadelphia, PA

Laboratory Assistant Co-op

October 2018 - March 2019

- Communicated and collaborated effectively with lab technicians to complete timely tasks with limited equipment.
- Took ownership of chain of custody sheets for industrial waste test samples entering the plant.

Projects

BDO Tracker

Web Developer (Django, HTML, CSS JavaScript, MySQL)

August 2021 – September 2021

- Built a website to help users optimize their daily income by tracking the most profitable items for various activities
- Provided users updated item information by producing a scheduled python script that updates the database every 16 minutes from a POST API request.
- Hosted at: <http://da593.pythonanywhere.com/marketplaceapp/home>

Binary Distillation Solver

Web Developer (HTML, CSS JavaScript, React)

October 2021 – October 2021

- Built an interactive website that solves for the number of stages required for a binary distillation column
- Utilized plotly graphing library to plot the McCabe-Thiele graphical method that changes based on user input
- Hosted at: <https://da593.github.io/ReactBinary/>

Interactive Calculator

Software Engineer (Java)

Drexel University

February 2021 – February 2021

- Developed a calculator with a GUI using Java AWT package
- Utilized the client-server model to display a calculator on the client-side and calculations on the server-side

FlappyBlock

Project Manager and Lead Developer (MATLAB)

Drexel University

January 2018 - March 2018

- A MATLAB side-scrolling game with keyboard input, scoreboard, and collision detection inspired by FlappyBird
- Organized and lead team meetings finishing the project ahead of the 10 week schedule