

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 – CSS, HTML, Java, JavaScript, MATLAB, Python

Software - Aspen Plus, Simulink, Microsoft Office

IDEs – Eclipse, Jupyter Notebook, Visual Studio Code

Version Control – Git

Work Experience

Drexel University

Philadelphia, PA

Script Developer (Python)

January 2020 - May 2021

- Developed a stock-driven solar photovoltaics dynamic material flow assessment in Python
- Created unit tests via pytest in order to assure the model's assumptions are held as more parameters were added
- Wrote a supporting information document to help users understand and re-use the model for their own study

Philadelphia Water Department

Philadelphia, PA

Laboratory Assistant Co-op

October 2018 - March 2019

- Performed routine tests of water samples including suspended solids, biochemical oxygen demand, and pH
- Prepared standard solutions to determine phosphorus and chlorine concentration of water samples
- Helped manage chain of custody sheets for industrial waste coming into 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
- Utilize Fetch API to GET updated values from a local database and to dynamically update the table values
- 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
- Implemented input validation, tooltips, and alerts to guide users alongside a dynamic graph to demonstrate the McCabe-Thiele method
- Hosted at: <https://da593.github.io/ReactBinary/>

Interactive Calculator

Drexel University

Software Engineer (Java)

February 2021 – February 2021

- Developed a calculator with a GUI using Java AWT package
- Utilized a server to calculate the mathematical expression inputted and is sent to the calculator client to be displayed

FlappyBlock Project

Drexel University

Project Manager and Lead Developer (MATLAB)

January 2018 - March 2018

- A MATLAB side-scrolling game with keyboard input, scoreboard, and collision detection inspired by FlappyBird
- Organized and lead team meetings discussing project milestones and deadlines