# **Christopher Chan**

Christopherc0923@gmail.com | 929-300-9723 | Personal Web | Github | LinkedIn

#### WORK EXPERIENCE

### Process Engineer / Intel, Hillsboro, OR

Jun 2022 – Present

- Increased efficiency and clarity for engineers by rebuilding the website using **ReactJS**, migrated database pulling from **VBA** scripting to **Python** and **SQL** to serve as the website backend database, deployed website onto Intel web servers
- Developed dashboards that visualized data trends for wafer processing tools using **PowerBI**, resulting in improved data-driven decision-making for manufacturing processes and identifying solutions for unexpected tool errors.
- Participated in a gig aimed at identifying manufacturing limiters by leveraging and visualizing data
- Automated daily tasks using **Python**, effectively reducing time spent on repetitive activities and allowing for increased focus on high-impact issues and priorities
- Collaborated with engineers to develop models to troubleshoot tool issues and designed experiments to evaluate the models

# Engineering Project Management Intern / Pfizer, Pearl River, NY

May 2021 - Apr 2022

- Supported engineering projects, participated in project planning meetings, and managed multiple projects simultaneously
- Coordinated with scientists and engineers to define project scope, resulting in development of 25+ laboratory rooms
- Assisted in the construction of laboratory facilities, ensuring adherence to industry standards and regulations

# **SKILL**

C++, Django, Excel, Express, HTML/CSS, JavaScript, JMP, MongoDB, PowerBI, Python, R, ReactJS, STATA, SQL, Toad

#### **PROJECT**

Personal Website Ongoing

- Developed a visually appealing, responsive personal website using **MERN** framework, showcasing a variety of projects such as machine learning projects, simple **ReactJS** applications, and websites built with **Django** framework
- Deployed and maintained live websites using GitHub Pages and PythonAnywhere

#### **Process Simulation – Cooper Union**

Apr 2021 – May 2021

- Developed a model to predict key properties of organic solvents using limited experimental data
- Applied chemical engineering concepts (Rachford-Rice, Raoult's law, Van't Hoff) and numerical methods (Gradient descent, Newton's method, Lagrange polynomial) on **Python** to implement the model effectively
- Significantly reduced the need for bench experiments by utilizing the model to determine intrinsic chemical properties

# **CERTIFICATION**

IBM Data Science Nov 2022

- Conducted capstone project to determine successful landing of SpaceX's Falcon 9 using machine learning models.
- Utilized data collection (**API, BS4 webscraping**), cleaning, and analysis methodologies with **pandas, SQL**, and data visualization libraries (**plotly, folium, seaborn**)
- Identified key features correlated to rocket launch success and concluded that decision tree model achieved highest accuracy of 0.89 based on confusion matrix and score analysis.

# **Google Data Analytics**

Oct 2022

- Cleaned 5.8M observations and created visualizations using **R** to visualize difference between casual and member riders
- Identified temporal and seasonal variations in the usage patterns of casual and member riders, offering potential avenues for converting casual riders to members

# **EDUCATION**