

ALEXANDER CHOU

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Objective: Obtain a challenging software engineering internship during Summer/Fall 2023

EDUCATION

The University of Pennsylvania

Jan 2022 - Current

Master of Computer Science and Information Technology – GPA: 4.0/4.0

Expected Graduation: Dec 2023

- Current/Past Coursework: *Artificial Intelligence (current), Machine Learning (current), Data Structures & Software Design, Algorithms & Computation, Software Development, Discrete Math*
- Spring 2023 Coursework: *Computer Systems, Database and Information Systems*

The University of Texas at Austin

2014 - 2019

Bachelor of Science, Mechanical Engineering – GPA 3.6/4.0

CodePath Pathway

Jan 2023

Intermediate Web Development Program – JavaScript, HTML, CSS

SKILLS

Languages: Python, Java, JavaScript, C, HTML, CSS, SQL

Libraries and Frameworks: numpy, pandas, streamlit, scikit-learn, matplotlib, React

Applications: IntelliJ, VSCode, Pycharm, Microsoft Office, Jupyter Notebook, Matlab, SAP, AIM EDMS, Git

PROJECTS

Who Has COVID-19?:

- Designed and implemented terminal-based application using Java which reads in JSON and text data files, cleans, and performs analysis on the impact of COVID in relation to income, location, and home property value
- Built using N-tier architecture and common Java design patterns

Poker Popularity Tracker:

- Created a web app using Python which determines poker tournament viewership by state using Twitter scraper

WORK EXPERIENCE

Pemex*

Jan 2022 – May 2022

Project Engineer – Deer Park, Texas

- * Pemex acquired Shell's Deer Park Manufacturing Complex in January 2022
- Same job responsibilities as previously with Shell

Shell

June 2019 – Jan 2022

Project Engineer – Deer Park, Texas

- Managed engineering-related projects in storage tank rejuvenation program (≤ 15 tanks concurrently)
- Reduced engineering design change process duration by 33%, resulting in $\leq \$100k$ savings per tank project
- Influenced and coordinated multi-discipline technical groups without direct authority, manage stakeholders, focal point for contract partners and vendors
- Piloted new tank program continuous improvement roadmap and improved project milestones

Shell

Summer 2018

Equipment Engineering Intern – Geismar, Louisiana

- Designed and utilized Excel tool that provides various calculations for 140+ heat exchanger body flanges to reduce leaks, upgrade gaskets, and improve overall heat exchanger reliability

Valero, LyondellBasell, Prysmian Group

Summer 2017, Fall 2016 + Fall 2017, Summer 2016

Engineering Intern / Co-op

- Various engineering internships (Valero, Prysmian Group) and 2 co-ops (LyondellBasell) revolving primarily around reliability engineering, maintenance, and process improvement