# Alex Chen

Brooklyn, NY | itsalexchen@gmail.com | LinkedIn | GitHub | Portfolio

## EDUCATION

**New York City College of Technology, CUNY** - Brooklyn, NY                                          June 2024
**Bachelor of Science in Data Science** | GPA: 3.8
Relevant Coursework: Data Structures, Database Fundamentals, Artificial Intelligence, Machine Learning for Physics, Information and Data Management, Non-Relational (NoSQL) Technologies, Object Oriented Programming in Java

## TECHNICAL SKILLS

**Languages:** Python, SQL, HTML, CSS, Sass, JavaScript, TypeScript, Java, Go, Bash
**Libraries/Frameworks:** Pandas, Matplotlib, Scikit-learn, React, Jest, TensorFlow, Node.js, Express, Supertest, Bootstrap
**Technologies:** Git, GitHub, Jupyter Notebooks, Postgres, MongoDB, Redis, Figma, Supabase, Excel, Neo4j, Tableau

## EXPERIENCE

**Develop for Good - Software Engineer** | Stanford, CA (Remote)                          April 2023 - Present
- Spearheaded the design and implementation of an ELT pipeline alongside a team of 8 engineers, utilizing Python, SQL, and Apache Airflow, facilitating the movement of data to a centralized data warehouse and enabling holistic data views
- Collaborated closely with the team and clients to establish a modern data stack based on the client's requirements to provide insights for informing product, content, and technical decisions to expand the client's global reach

**The City University of New York - Energy Technology Intern** | New York, NY                July 2022 - Aug 2022
- Led End-to-End testing for an Excel workbook application by developing and executing comprehensive test plans using Python, resulting in faster processing times by over 20% and a significant reduction in application crashes
- Developed a Python script that automates data processing of raw data with over 100,000 data points into a report that can be referred back to later, saving time manually querying data by 50% for 2 analysts
- Accelerated and automated the testing process by creating a Python script to generate more than 5000 sample data, facilitating End-to-End testing of an Excel workbook app
- Improved software reliability by implementing comprehensive unit tests using Python, effectively validating the functionality of the Django application prior to deployment to production

**The Urban Assembly - Operations & Data Intern** | New York, NY                          Mar 2022 - May 2022
- Constructed interactive dashboards by using Google Data Studio for faster access to information for 3 teams
- Analyzed over 10,000 data points across 3 departments enabling informed decision-making on resource placement

## PROJECTS

**Job Application Tracker Web App -** Github
- Developed a full-stack web app using TypeScript React and Express that allows users to manage items in their job tracker while seeing the data about the roles through data visualizations
- Built a web application's backend, utilizing PostgreSQL and Express.js to store role information and to create a RESTful API for client-server communication
- Implemented GitHub Actions workflows for CI/CD, enabling rapid and reliable delivery of new features to production
- Constructed unit tests and integration tests with React Testing Library and Jest, achieving 70% code coverage and improving overall reliability and quality for end users

**Portfolio** - Project Page
- Designed and developed a portfolio website using React and Styled-Components showcasing current and past projects
- Constructed unit tests using the React Testing Library and Jest, achieving 100% code coverage
- Utilized GitHub Actions to automate the process of building and deploying a portfolio website, enabling faster and more efficient updates to the website

**Emotion Detection Web App** - GitHub
- Constructed a web application in a team of 3 that predicts emotions within a piece of text using natural language processing
- Implemented Multinomial Naive Bayes Classifier using Scikit-learn and NLTK with an accuracy of 88%
- Deployed an interactive web application through Streamlit Community Cloud

**Reddit Client App** - Project Page
- Created an interactive Reddit client application using HTML, CSS, JavaScript, and React that lets users select subreddits and view over 50 posts and comments within them in a simple format
- Constructed a wireframe and component tree for the application within Figma in preparation for development
- Deployed an interactive front-end web application through Netlify