

# Alex Chen

Brooklyn, NY | [itsalexchen@gmail.com](mailto:itsalexchen@gmail.com) | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

## EDUCATION

### New York City College of Technology, CUNY

Bachelor of Science in Data Science | GPA: 3.8/4.0

Brooklyn, NY

June 2024

- **Relevant Coursework:** Data Structures, Database Fundamentals, Artificial Intelligence, Machine Learning Fundamentals, Machine Learning for Physics, Information and Data Management, Non-Relational (NoSQL) Technologies

## TECHNICAL SKILLS

**Languages:** Python, SQL, HTML, CSS, Sass, JavaScript, TypeScript, Java, Bash, Go

**Libraries/Frameworks:** Pandas, Scikit-learn, Matplotlib, React, Jest, TensorFlow, NLTK, Node.js, Express, PyMongo

**Technologies:** Git, GitHub, Jupyter Notebooks, Postgres, MongoDB, Redis, Figma, Excel, Neo4j, Data Studio, Tableau

## PROGRAMMING PROJECTS

### Job Application Tracker Web App - [Github](#)

Jan 2023 - Present

- Developed a full-stack web app using TypeScript React and Express that allows users to create, view, update, and delete items in their job tracker while seeing the data about the roles through data visualizations
- Created and formed a database using PostgreSQL to store information about the roles the user applied for
- Implemented RESTful API using Express.js to support web application
- Create a GitHub Action workflow for continuous integration

### Portfolio - [Project Page](#)

Jan 2023

- Designed and developed a portfolio website using React and Styled-Components showcasing current and past projects
- Created unit tests using the React Testing Library and Jest, achieving 100% code coverage
- Implemented GitHub Actions workflows for continuous integration and deployment

### Emotion Detection Web App - [Github](#)

Oct 2022 - Dec 2022

- 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%

### NYC Airbnb Listings Analysis - [Github](#)

Nov 2022

- Analyzed 100,000 data points about NYC Airbnb Listings using Python libraries, Pandas, Seaborn, and Matplotlib, to learn more about the Airbnb marketplace in NYC and how these listings affect the neighborhoods of each of the five boroughs

### Image Classification Web App - [Github](#)

Oct 2022

- Developed a web application that classifies images of natural scenes around the world using machine learning
- Implemented Random Forest Classifier using Scikit-learn, Numpy, and Pandas with an accuracy of 53%

### Reddit Client App - [Project Page](#)

Aug 2022

- 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

## RELEVANT EXPERIENCE

### CUNY Tech Prep

New York, NY

Data Science Fellow

July 2022 - Present

- Selected for a competitive data science fellowship with students from CUNY's senior colleges where Fellows create technical projects using tools like Python 3, Jupyter Notebooks, Pandas, Numpy, Scikit-learn, and SQL
- Participate in weekly courses and learn industry best practices for exploratory data analysis (EDA), feature engineering, data collection and processing, statistical modeling, data visualization, machine learning techniques, data science process, and big data

### The City University of New York, CUNY Conserves Team

New York, NY

Energy Technology Intern

July 2022 - Aug 2022

- Conducted End-to-End testing on an Excel workbook application by developing and executing comprehensive test plans and test cases, resulting in faster processing times by over 20%
- 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%
- Created a Python script to create over 5000 sample data to conduct End-to-End testing on an Excel workbook app
- Implemented unit tests using Python to ensure that code was written correctly before deploying to production

### The Urban Assembly

New York, NY

Operations & Data Intern

Mar 2022 - May 2022

- Constructed interactive data visualizations for easier and faster access to information for members across 3 teams
- Analyzed over 10,000 data points across 3 departments to help better plan resources placement
- Streamlined and maintained the usability of 10 data sets across different departments