# **Alex Chen**

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

#### **EDUCATION**

# New York City College of Technology, CUNY

Brooklyn, NY

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

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, R

**Libraries/Frameworks:** Pandas, Scikit-learn, Matplotlib, React, Jest, TensorFlow, NLTK, Node.js, Express, PyMongo **Technologies:** Git, GitHub, Jupyter Notebooks, Postgres, MongoDB, Redis, Figma, Excel, Data Studio, Tableau

#### PROGRAMMING PROJECTS

### Job Application Tracker Web App - Github

Jan 2023 - Present

- Develop a full-stack web app using TypeScript React and Express that allows users to create, view, update, and delete items in their job tracker
- Create and form a database using PostgreSQL to store information about the roles the user applied for
- Implemented RESTful API using Express.js to support web application

Portfolio - Project Page Jan 2023

- Designed and developed a portfolio website using TypeScript React, and Styled-Components showcasing projects, personal
  information, and goals
- Created unit tests using the React Testing Library and Jest, achieving 100% code coverage

### **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%

## 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 July 2022 - Present

Data Science Fellow

- 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

- Tested and improved an import app, by reviewing and collecting feedback on 30+ test cases, with the lead software engineer resulting in faster speeds by over 20%
- Developed a Python script to clean raw data and create a report that can be referenced, saving over 15% of time
- Implemented unit tests using Python to ensure that code was written correctly before deploying to production
- Utilized Python to create sample data with over 5000 data points used in testing an Excel workbook app

## New York City College of Technology

Brooklyn, NY

Undergraduate Researcher

May 2022 - June 2022

- Created 25+ case studies working from an online resource containing datasets to assess how data science students compare and differ from the industry standard for interviews
- Developed a pipeline using a Jupyter Notebook for searching details about interview questions for NYCCT CST faculty and students

#### The Urban Assembly

New York, NY

Operations & Data Intern

Mar 2022 - May 2022

- Constructed data visualizations for easier and faster access to information for members across 3 different 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