Alex Chen

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EDUCATION

New York City College of Technology, CUNY **Brooklyn, NY**
Bachelor of Science in Data Science | GPA: 3.8/4.0 *06/24*

- **Relevant Coursework:** Data Structures, Database Fundamentals, Information and Data Management (Python), Artificial Intelligence, Machine Learning for Physics, Object Oriented Programming in Java, Linear Algebra

TECHNICAL SKILLS

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

Libraries/Frameworks: Pandas, Matplotlib, Scikit-learn, React, Jest, Bootstrap, Node.js, Express, Redux

Technologies: Git, GitHub, Jupyter Notebooks, Excel, Data Studio, Tableau, Figma

PROGRAMMING PROJECTS

Emotion Detection Web App - GitHub *10/22 - 12/22*

- Constructed a web application 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 *10/22*

- 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 *08/22*

- Created an interactive Reddit client application that retrieves over 50 posts and comments from Reddit using HTML, CSS, JavaScript, and React.js to deepen understanding of React and the virtual DOM
- Constructed a wireframe and component tree for the application within Figma in preparation for development

Biodiversity in National Parks Analysis - GitHub *05/22*

- Analyzed 30,000 data points using python libraries, Pandas, SciPy, NumPy, Seaborn, and Matplolib, to answer questions about different species in 4 national parks and the 191 endangered species within the parks
- Utilized chi-squared tests to see statistically significant differences in conservation status rates among 7 different groups of species

RELEVANT EXPERIENCE

CUNY Tech Prep **New York, NY**
Data Science Fellow *07/22 - 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 *07/22 - 08/22*

- 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 *05/22 - 06/22*

- 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 *03/22 - 05/22*

- Identified opportunities for improvement within the data science process over 12 different data sources
- 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