

Patrick Salsbury

p.r.salsbury@gmail.com | (408) 887-4634 | [LinkedIn](#) | [Website](#) | [Github](#)

EDUCATION

University of California, San Diego | B.S. Data Science, Business Minor Expected June 2024

- Data Management, Intro to Machine Learning, Applications of Data Science, Data Analysis & Inference, Business Analytics

De Anza College | A.S. Computer Science

September 2018 - June 2021

- Data Science Fundamentals, Data Structures & Algorithms, Object Oriented Analysis and Design

Certifications

- [IBM Data Engineering](#) (Coursera) - MySQL, PostgreSQL, IBM DB2, Apache Spark, Airflow

January 2023 - Present

- [Google Data Analytics](#) (Coursera) - Python, SQL, Excel, Tableau, R

February 2022 - May 2022

TECHNICAL SKILLS

Languages: Python, SQL, Java, Linux, Bash Scripting

Databases: MySQL, PostgreSQL, IBM DB2, SQLite, Redshift

Libraries / Frameworks: Pandas, Numpy, SkLearn, Apache Spark, Airflow, PySpark, SciPy, Plotly, Seaborn

Softwares: Azure, AWS, Jira, Github Version Control, Databricks, Power BI, Tableau

EXPERIENCE

Computer Science Coach | *TheCoderSchool*

February 2023 - Present

- Mentored students ranging from Elementary to High School improving their knowledge of computer science and engineering.
- Supported the development of apps in **Python** and **Scratch** over a 4-6 week timeframe while simultaneously teaching the fundamentals of programming.

Data Science Intern | *HM Electronics*

June 2022 - September 2022

- Analyzed customers device data improving the quality of production and customer relationships by showcasing areas of concern.
- Extracted semi-structured console log data from 100+ customer devices to ingest into a **Azure Blob Data Lake**.
- Automated the **ETL** process on 30+ million raw records of data using **PySpark** on **Databricks(Microsoft Azure)**.
- Predicted customer device failure using **Classification** and **Clustering ML** models, isolating variable indicators for tech support.
- Led sprint presentations to showcase findings using **Python**, **SQL**, and **Power BI** to influence decision-making of product managers and software engineers.

Mathematics Tutor | *De Anza College*

August 2019 - April 2021

- Led college students in various mathematics courses including Precalculus, Calculus, Differential Equations, and Linear Algebra, through personalized and group tutoring sessions.
- Conducted group workshops, mentoring up to 10 students at a time resulting in more than a 50% increase in passing rates.
- Developed effective study plans for students, resulting in significant improvement of scores in the 90%+ range.

PROJECTS

Popular Youtube Video Titles Generator

Present

- Utilized Youtube APIs to store and analyze daily top 50 trending videos to predict new possible trending video titles.
- Established an **ETL pipeline** to populate an **SQLite database** after processing words using **Pandas** and **NLTK**.
- Generated titles using sentence linguistics, **unigram NLP models**, and **N-gram NLP models**.

Recipe Ratings Analysis and Predictor

February 2023

- Analyzed 234,429 different recipe reviews given on Food.com to **discover underlying associations** and trends regarding rating.
- Concluded statistically significant results using **hypothesis testing** and after performing **exploratory data analysis**.
- Developed a **Decision Tree model** using **CV grid search** after testing models using SKLearn pipelines.

Best Companies to Work For Analysis

July 2021

- Showcased the top 500 best companies to work for in 2021 according to Forbes.com using **Python** and **SQL**.
- Extracted and transformed data using **web-scraping** and **data processing** to store into an **SQLite database**.
- Showcased the top 500 best companies to work for by utilizing **embedded-SQL** queries and **Matplotlib**.

LEADERSHIP & VOLUNTEERING

Chancellor, Vice President of Scholarship & Awards | *UC San Diego - Delta Sigma Pi*

December 2021 - Present

- Led and managed as the **primary spokesperson** of a professional business organization consisting of 60+ members.
- Demonstrated strong **leadership** skills, exhibiting **teamwork** and effective **communication** increasing member engagement.

Computer Repair Technician | *De Anza College*

January 2020 - March 2020

- Refurbish 3+ laptops per week and other computer hardware/firmware enabling underprivileged students to gain advantage.
- Collaborated alongside computer engineers to **problem-solve** and **debug** defective components.