JONATHAN PAPIR

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A seasoned math teacher, who can communicate complex ideas to technical and non-technical people alike. I possess a superb capacity for problem solving, an extremely high level of comfort with statistical concepts, and am looking for my first job as a data analyst. I've devoted three years of free time to become proficient in the technical aspects of the field, through courses and self-learning, and leveraged these skills to produce personal projects. Please look at **my portfolio** to see what I'm capable of doing.

EXPERIENCE

SEPT 2016 – PRESENT: MATH TEACHER, FUSION ACADEMY – LOS GATOS, CA

- Instructs students in a one-on-one learning environment focusing on developing strong quantitative analysis skills.
- Delivers content to non-technical audiences that relate difficult ideas in a clear and easy to understand manner.
- Pioneered the use of iPad technology in the classroom and lead the transition to its adoption by the entire math department.
- Produced over fifty testing and homework resources that are used by the math department.
- Praised in every yearly review as having excellent (highest rating given) content knowledge.
- Recognized in over 90% of quarterly reviews for delivering high-level lessons that are concise and easy to digest.
- Manage resources and grading for 16 courses every semester in Canvas' learning management system.
- Utilize Salesforce to access student data and tailor lessons plans on an individualized level.

SEPT 2011 – SEPT 2016: REPORTING ANALYST/DISPATCHER, UNDERGROUND COMMUNICATIONS – SAN JOSE, CA

- Wrote hundreds of daily and monthly reports in Microsoft Excel summarizing property damage in over 30 regions.
- Maintained the lowest error rate among all employees in the company.
- Conducted occasional ad hoc reporting requests for clients.
- Consistently met every reporting deadline.
- Monitored radio and computer aided display systems of Bay Area fire departments, for reports of fire/flood damage.
- Dispatched fire/flood chasers to the scene of an incident, upon confirmation of property damage.
- Wrote a script that restarted listening stations automatically, which reduced the rate of missed leads by over 10% per month.

MAY 2006 – PRESENT: PRIVATE TUTORING, SELF-EMPLOYED– SAN JOSE, CA

- Provided support for students with emphasis on improving problem solving skills.
- Nurtured relationships with customers to facilitate educational growth and customer satisfaction.
- Maintained online marketing presence to capture new clients.
- Hundreds of satisfied customers consistently emphasizing their children's renewed interest in math.
- Received dozens of word of mouth recommendations such that an online marketing presence is now rarely needed.

PROJECTS

REDDIT ACCOUNTING SURVEY ANALYSIS – My wife was transitioning to accounting and wanted to know what she could do to increase her long-term salary potential. To help, I performed an exploratory data analysis (EDA) on data from Reddit using Jupyter notebooks. I used Pandas/NumPy to clean the data, Matplotlib/Seaborn to visualize it, and Sklearn/Statsmodels to build regression models. We identified the two largest factors and my wife was able to tailor her job search accordingly. (Accounting Analysis)

REDDIT ACCOUNTING SURVEY ANALYSIS – My wife was transitioning to accounting and wanted to know what factors increase long-term salary potential. To help, I performed an exploratory data analysis (EDA) on data from Reddit using Python. I cleaned the data, visualized it, and built regression models, which enabled my wife to tailor her job search accordingly. (Accounting Analysis)

REDDIT ACCOUNTING TABLEAU STORY – While analyzing data from the accounting EDA, I noticed signs of a pay gap between male and female accountants. This project is a Tableau story with visualizations that help expose the difference. (US Accounting Viz)

ETL CRAIGSLIST (CL) WEB SCRAPER – An extract/transform/load tool, written in Python, to get data on my competition as a math tutor. Tutoring prices from the services section of CL were *extracted* using Requests, BeautifulSoup, and Regex, then *transformed* using Pandas/NumPy, and lastly *loaded* into a local PostgreSQL database using Psycopg2. (Craigslist Web Scraper)

CRAIGSLIST EXPLORATORY DATA ANALYSIS – Using SQL to query the data collected from the ETL CL web scraper, I visualize tutoring prices across various geographic segments using Plotly Express and Matplotlib in Python. Based on the results, I was able to raise my hourly rate and still remain competitive, realizing an increase in revenue of nearly 25%. (Craigslist EDA)

NATIONAL TUTORING PRICES DASHBOARD – An interactive Tableau dashboard, which uses data collected from my ETL CL web scraper to understand tutoring prices at the national, regional, state, and local level. (Tutoring Dashboard)

TELEVISION (TV) AD CAMPAIGN REPORT – A Python data pipeline, built to automate the process of cleaning advertising data from Excel files, calculating key metrics, and generating summary reports. I present the findings of one report in a PowerPoint presentation that details the most cost-efficient TV networks for ad spend and gives recommendations for future spending. (Ad Campaign Report)

SCHOLARLY ARTICLE ANALYSIS – A project using SciPy, Statsmodels, and Pandas, which performs A/B testing, confidence interval analysis, and linear regression modeling to understand acupuncture treatments and their effect on hypertension. (Acupuncture Analysis)

POKÉMON LEGENDARY CLASSIFIER – K-nearest neighbor and logistic regression models I built to predict whether a Pokémon is legendary. The models were trained on Pokémon from generation 1-6 and tested on generations 7 and 8. Both models achieved 90%+ accuracy, despite imbalanced classes. (Pokémon Classifier)

SQL QUERIES – Queries I wrote to practice solving common business problems using joins, window functions, subqueries, common table expressions, and more, performed in MySQL and PostgreSQL databases, including documentation of my logic. (SQL Queries)

ISLR TO PYTHON – This project takes R code from labs in the textbook *Introduction to Statistical Learning* and ports it to Python, recreating the results from the textbook as closely as possible. Python is also used to answer the text's exercises. (ISLR to Python)

EDUCATION

B.S. BUSINESS ADMINISTRATION, INTERNATIONAL BUSINESS: SAN JOSE STATE UNIVERSITY, **MAY 2011**

COURSES/CERTIFICATIONS

PYTHON BASIC – CERTIFICATION, HACKERRANK, **OCTOBER 2022**
SQL INTERMEDIATE - CERTIFICATION, HACKERRANK, **MARCH 2022**
THE ULTIMATE MYSQL BOOTCAMP: GO FROM SQL BEGINNER TO EXPERT - CERTIFICATION, UDEMY, **JAN 2021**
CIS 107 – DATA SCIENCE, SAN JOSE CITY COLLEGE, **DEC 2020**
CIT 134A – PROGRAMMING IN PYTHON, EVERGREEN VALLEY COLLEGE, **MAY 2020**
INTRODUCTION TO COMPUTATIONAL THINKING AND DATA SCIENCE - CERTIFICATION, EDX, **MAY 2020**
INTRODUCTION TO COMPUTER SCIENCE AND PROGRAMMING USING PYTHON - CERTIFICATION, EDX, **FEB 2020**
LEARNING PYTHON FOR DATA ANALYSIS AND VISUALIZATION - CERTIFICATION, UDEMY, **DEC 2019**

References available upon request.