

JONATHAN PAPIR

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A seasoned mathematician who can communicate complex ideas to technical and non-technical people alike. Looking to transition into data analytics by leveraging a passion for solving problems and a high level of comfort with statistical concepts. Devoting three years of free time to courses and self-learning has enabled me to become well versed in the technical aspects of the field and produce personal projects demonstrating aptitude. 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.
- Oversee multiple long-term projects on migration or recreation of class resources from one learning management system to another.

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

- Wrote hundreds of reports in Microsoft Excel summarizing property damage in over 30 regions and distributed to stakeholders.
- Maintained the lowest error rate among all ten employees in the company.
- Conducted weekly and monthly ad hoc reporting requests for clients.
- Simultaneously monitored radio and computer aided display systems of over 40 fire departments for reports of fire/flood damage.
- Dispatched between 2-10 fire/flood chasers to the scene of a lead upon confirmation of property damage.
- Researched and summarized information from public and private databases for thousands of leads regarding property damage.
- Wrote a script that restarted listening stations automatically, reducing the rate of missed leads by over 10% per month.

MAY 2007 – JUNE 2008: COMPUTER CONTRACTOR, FUSE INTEGRATED MARKETING SYSTEMS – WALNUT CREEK, CA

- Oversaw organization and data input for two client databases.
- Performed maintenance and upgrades of local network consisting of five computer workstations.
- Gathered requirements from clients regarding creating new or improving existing marketing materials.
- Designed business development marketing materials using Adobe InDesign.
- Edited hundreds of marketing photos during post-production using Adobe Photoshop.
- Responsible for introducing a local file server, which improved organization and access to client marketing materials.

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

- Provided support for hundreds of students with emphasis on improving problem solving skills.
- Nurtured relationships with families to facilitate educational growth and student satisfaction.
- Hundreds of satisfied families consistently emphasizing their children's renewed interest in math.

PROJECTS

REDDIT ACCOUNTING EXPLORATORY DATA ANALYSIS

- Using Python, survey data from Reddit was cleaned and visualized to explore relationships between salary and other factors.
- The two factors contributing most to annual salary were identified and regression models were built to quantify these relationships.
- During the analysis, evidence of a pay gap among genders emerged, and is explored further in this [Tableau story](#).

CRAIGSLIST (CL) WEB SCRAPER

- A Python tool to scrape CL postings and store the results in PostgreSQL to curate a dataset on competing math tutoring prices.
- Duplicate postings were identified with word vectorization and then removed to ensure only prices for unique tutors remained.
- Using [Tableau](#) to compare prices across geographic segments, it was determined that my rates could be increased by almost 25% and still remain competitive.

TELEVISION (TV) AD CAMPAIGN REPORT

- A Python data pipeline that automates cleaning ad data from Excel files, calculating key metrics, and generating summary reports.
- One report's results are summarized in a PowerPoint presentation detailing which TV networks are most cost-efficient for ad spend.

SCHOLARLY ARTICLE ANALYSIS

- Using data from a scholarly article, A/B testing, confidence interval analysis, and linear regression modeling was performed to understand acupuncture treatments and their effect on hypertension.

POKÉMON LEGENDARY K-NEAREST NEIGHBOR AND LOGISTIC CLASSIFIERS

- Models built to predict whether a Pokémon is legendary, trained on generation 1-6 data, which had heavily imbalanced class sizes.
- Imbalanced class sizes made training difficult as a naïve model could achieve 92% accuracy by always guessing non-legendary.
- Using over and under-sampling techniques during training resulted in models that were able to generalize better, achieving 92-94% accuracy on testing data from generations 7-8 (82% non-legendary), indicating the model could distinguish reasonably well.

SQL QUERIES

- Queries written in MySQL and PostgreSQL, which include documentation of all logic.
- Queries perform common business tasks utilizing joins, window functions, subqueries, common table expressions, and more.

R TO PYTHON

- A project to port R code from recently released chapters of the textbook *Introduction to Statistical Learning* to Python.
- Code from labs on neural networks, survival analysis, and regression is reproduced as closely as possible.

EDUCATION

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

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**