

MATT SHADISH

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EDUCATION

Master of Science, Analytics

UNIVERSITY OF SAN FRANCISCO, GPA 3.97

Expected June 2015

Bachelor of Science, Mechanical Engineering

UNIVERSITY OF CALIFORNIA, LOS ANGELES, GPA 3.75

December 2013

Honors: Phi Beta Kappa, Tau Beta Pi

WORK EXPERIENCE

General Electric, San Ramon, CA

November 2014 – Present

Data Analytics Intern

- Designed and implemented features for Calaca, a JavaScript front end to Elasticsearch, to improve usability for end-users searching through GE's parts database
- Created a Python Flask app to supplement Calaca and provide an 'Export to CSV' feature for Elasticsearch

Engage3, Davis, CA

December 2013 – August 2014

Data Scientist, Category Management Algorithms

- Managed, designed, and implemented Oracle PL/SQL algorithms to categorize 800M+ retail product records
- Improved runtime of daily Oracle PL/SQL batch processes by 90% by developing incremental features
- Performed regression analysis of product prices to model how regular and promotional prices compare among retailers
- Collaborated with other members of the Data Science team using TortoiseSVN, Git, and Assembla
- Ran daily reports on user retention rates using PostgreSQL and weekly reports on data quality via Apache Solr queries
- Designed a Python script that relates similar retail products using image comparison to compensate for incomplete data
- Leveraged knowledge of pricing algorithms and worked with EIS team to begin migration to Apache Cassandra

ATAC, Sunnyvale, CA

June 2012 – June 2013

Aviation Data Analyst

- Participated in airport and airspace noise and emissions analysis studies using in-house software and Microsoft Excel
 - Provided verbal and written feedback for data analysis procedures, streamlining the process
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RELEVANT TECHNICAL SKILLS

- Programming Languages
 - Proficient: Python, SQL (Oracle PL/SQL, PostgreSQL, MySQL), R, LaTeX
 - Familiar: SAS, Bash, JavaScript, MATLAB, Java, C++
 - Project management/version control: Git, TortoiseSVN, Assembla
 - Other relevant technologies: Elasticsearch, MongoDB, Apache Solr
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PROJECTS

Kaggle: Sentiment Analysis on Movie Reviews

October 2014 – Present

- Applying word vectorization in conjunction with a Support Vector Machine to classify movie review sentiment (on a discrete scale from 0 to 4) in Python

Eccentric Exercise Machine Prototype

June 2013 – September 2013

Founder, Lead Engineer

- Researched, designed, and fabricated a prototype exercise machine specifically made to facilitate eccentric exercise
- Design
 - Independently designed a method to provide specialized eccentric exercise via purely mechanical methods
 - Used Excel, 3D CAD software, and hand calculations for everything from preliminary calculations to optimization
 - Selected specific materials to ensure a factor of safety of at least 1.5 while maintaining cost effectiveness
 - Drafted and submitted a provisional utility patent application
- Fabrication
 - Calculated functional strengths of customizable parts from manufacturer Misumi when selecting/purchasing parts
 - Led a team of 4 in hand-fabricating the prototype, training team members in metal cutting, drilling & tapping holes