

Education

University of California, Berkeley
BA Applied Mathematics with focus in Optimization

Berkeley, CA
December, 2015

Experience

Stir Works
Software Developer
Designed, implemented and tested all functionality on a business intelligence web application

Pasadena, CA
2015-Present

Mike's Bikes
Technician
Employed problem solving and teamwork to diagnose technical bicycle problems

Walnut Creek, CA
2014-2015

EPI Sports
Intern
Used regular expressions and excel to compile data for a database

Huntington Beach, CA
2010 -2012

ESPNRISE/DyestatCal
Intern
Worked with a team of journalists to provide photography, website and database management

Arcadia, CA
2010 -2012

Skills

Languages: Python, Javascript, Java, Swift, HTML, CSS, Matlab, Latex

Frameworks/Technologies: Django, Meteor, Bootstrap, Tableau, jQuery, Pandas, SQL, Apache

Concepts: Objected Oriented Programming, Signal Processing, Data Structures, Algorithm design, Regular Expressions, Database, UX/UI front-end design, Design Patterns

Application Development: Web development in Javascript using Meteor, Node.js and MongoDB, Data Visualization in Django in Agile Environment, team and individual version control with Git and JIRA, Machine Learning

Other skills: Officer of Cal Cycling, familiar with Illustrator/Photoshop, 4 years of High School Spanish

Projects

Smart Cell Analytics: Built in Python, Pandas, SciPy, Smart Cell uses machine learning algorithms such as the Kalman Filter and PCA to predict continuous usage on cell tower data over time using cell tower data

Stir Analytics for Business: Implemented all functionality on a business intelligence and data visualization SaSS Web Application built on Tableau, Bootstrap and on the Django backend. Included an internal mapping tool built using Canvas and Javascript in order to expedite desk repairs and create new internal insights on desk usage.

petShare: Worked with a team of students using Javascript and jQuery on the Meteor platform. Designed a mobile ready front end using Bootstrap and Adobe Illustrator to create professional looking graphics. Built a functioning search engine using regular expressions to search a MongoDB database.

Personal Website: Designed my personal website built on HTML, Javascript, jQuery and CSS using the foundation framework.

Coursework

- Structure and Interpretation of Computer Programs
- Advanced Linear Algebra
- Numerical Analysis
- Concepts Of Probability
- Data Structures and Programming Methodology
- Discrete Mathematics and Probability Theory
- Signal Processing
- Mathematical Optimization/Linear Programming

Personal Information

Personal Website: tylerdross.com
Github Profile: <https://github.com/trizzle21>

References can be provided upon request