

Education

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

Berkeley, CA
December, 2015

Experience

Stir Works
Software Developer

Pasadena, CA
2015-Present

Implemented and tested all functionality in a data visualization and business analytics platform as well as an internal mapping web application to aid in customer service, data insights, A/B testing and desk reliability

Mike's Bikes
Technician

Walnut Creek, CA
2014-2015

Employed problem solving and teamwork to diagnose technical bicycle problems

EPI Sports
Intern

Huntington Beach, CA
2010-2012

Used regular expressions and excel to compile data for a database

ESPNRISE/DyestatCal
Intern

Arcadia, CA
2010-2012

Worked with a team of journalists to provide photography, website and database management

Projects

Stir Analytics for Business: A business intelligence and data visualization SaSS Web Application built using React, nvd3.js, d3.js, Bootstrap, Django, and Django Rest Framework.

Stir Internal Desk Commissioning Tool: An internal mapping tool built using Canvas and jQuery in order to expedite desk repairs and create new internal insights on desk usage. Included a QR code reader to expedite desk installation.

Smart Cell Analytics: Built in Python, Pandas, SciPy, Smart Cell uses machine learning algorithms such as the Kalman Filter and PCA to predict usage of cell towers over time. Winner of the 2016 UCI Data Science Hackathon.

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.

Personal Website: Created my personal website and blog built on HTML, Javascript, jQuery and CSS generated using Jekyll.

Skills

Languages: Python, Javascript, Java, C, HTML5, CSS, Matlab, Latex, Sass

Frameworks/Technologies: Django, Meteor, Bootstrap, Tableau, jQuery, Pandas, SQL, Linux, Apache, Django Rest Framework, D3.js, React, Webpack

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, MongoDB, Django, Data Visualization and Web Applications in Agile Environment, team and individual version control with Git and JIRA, Worked with QA to build and implement test plans, Machine Learning, building, maintaining and utilizing APIs

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

Coursework

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

Personal Information

Personal Website: tylerdross.com

Github Profile: <https://github.com/trizzle21>

References can be provided upon request