

Jeffrey Tratner

610-529-1825 - jeffrey.tratner@gmail.com - jeffreynetratner.com - @jtratner on Github

Industry-Related Projects and Work Experience

Engineer, NearWoo

Santa Monica, CA - 2014 - present

- Maintain and improve Python infrastructure for real-time bidders (in Tornado), an ad-serving platform (on Google App Engine) and customer-facing site for advertisers (GAE) along with Angular JS front end.
- Set up monitoring infrastructure for bidders via Graphite and StatsD, eventually enabling us to double our throughput and proactively address latency issues.
- Refactored ad server code base, reducing costs by ~25-50% while improving throughput and data consistency.
- Built custom integration with the Salesforce API to enable non-technical staff to effectively engage with our data.

Pandas – Maintainer / Core Developer

June 2013 - Jan. 2014

- Contributed to and helped maintain Pandas, a Python data analysis library emphasizing performance and ease of use with a large existing codebase (~130K lines of code).
- Regularly pushed code, including work on simplifying data I/O wrappers, refactoring arithmetic methods, and improving test coverage and test utilities.
- Ran code reviews, addressed bug reports, and helped new contributors along with the rest of the core team.

Predictive Model for Sales Forecasting, National Analysts Worldwide

Philadelphia, PA - 2013

- Designed and led \$40,000 project to improve sales forecasting for client, a consumer product company.
- Developed multiple models employing both machine learning techniques and simple regressions to predict purchase behavior based on survey responses and previous purchase behavior.
- Architected database schema to effectively merge ~80,000 customer ratings with client's sales records.
- Performed analysis and visualization in Python, leading to model used for all of client's later sales forecasting.

Course Recommendation System, Bryn Mawr College (proposed)

Bryn Mawr, PA - 2012

- Designed and presented a course recommendation system for Bryn Mawr College over 3 month period.
- Published and documented SQL graph structure implementation (graphalchem) to represent connections.
- Prototyped system using 4 years of course records via Flask, SQLAlchemy, D3 and graphalchemy.

Other Work Experience

National Analysts Worldwide, R.A. in Project Management

Philadelphia, PA - 2012-2013

- Managed project teams (2-5 people) and translated client problems into effective market research studies.
- Drafted surveys, develop database schema, analyze results and synthesize reports to address client needs.
- Day to day lead for ~\$700K in projects for Consumer and Financial Services group.
- Led successful effort to move company to HTML invitations, leading to >10% increase in response rate.
- Ran and analyzed successful A/B test of email subject lines to better target key respondents.

Village Manager, Data Analyst

Philadelphia, PA - 2011-2012

- Collected and compiled data on a Philadelphia neighborhood for an economic analysis
- Maintained and updated cloud-based database of records in content management system

Brown University Computing and Information Services, Help Desk Consultant

Providence, RI - 2010-2011

- Resolved client technical issues in a friendly and efficient manner.
- Analyzed and compiled customer satisfaction surveys for presentation.

Technical Skills

- Fluent in **Python** and **JavaScript** (primarily via **Angular JS**) and use **git** on a regular basis.
- Experience with **Cython** and **Go**, used C, OCaml, Scheme, and Matlab in courses.

Education

Brown University, Bachelor's Degree in Biology

Providence, RI - 2006-2011

Online courses on machine learning, data analysis, software engineering and debugging.