

Anna Ayzenshtat

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Education

M.S. in Mathematics, **UT Austin**, 2013

B.A. in Mathematics, **UC Berkeley**, 2008

Work Experience

Freelancing Consultant

Data Science, 2017 - Present:

- Data transfer from **Kafka** to **Postgres** database.
- POC work with **Neo4j**.
- Performing predictive analytics using advanced machine learning packages.

What's for Dinner Today

Co-founder, 2018 - Present:

- **Natural Language Processing with Python**
 - Working on recipe recommender engine using the **gensim**, **NLTK**, and **spaCy** Python libraries.
- **Django Web Application**
 - Set up **Django**, **uWSGI**, **NGINX** to serve up the web application.

General Motors IT Innovation Center in Austin

Operations Research Analyst, 2014 - 2017:

- **Data Analytics with Python**
 - Cleaned data and generated summary reports with Python scripts utilizing the Pandas and XlsxWriter libraries.
- **CPLEX: Linear and Mixed Integer Programs for Supply Chain Forecasting**
 - Wrote models in OPL, Java, and Python programming languages.
 - Helped write custom Steel Bid Application to replace expensive third-party software.
 - Helped write vehicle configuration generator to fit forecasted statistics.
 - Wrote application to explain statistics with CPLEX feasoftware tool.
- **SAT4J: Satisfiability Solving**
 - Sped up parts of the Mixed Integer Programming code by utilizing the SAT4J satisfiability solver.

UT Austin Department of Mathematics

2010 - 2013

- **Teaching Assistant**: Integral Calculus for Science Majors, Fall 2011 and Spring 2013.
- **RTG Fellowship**, 2012.
- **National Science Foundation Research Training Grant**, 2010.

Private Tutor

2008-2014

- Python, Linear Algebra, Probability, Statistics, Numerical Analysis, Calculus, Real Analysis, Multivariable Calculus, Differential Equations, and Physics.

Skills

- Programs in **Java** and **Python**, including the **scikit-learn**, **numpy**, and **pandas** libraries.
- Familiar with **bash**, **git** version control.
- Dabbles in **Django**, **SQL**, **Javascript**, **D3**, **React**, **C**, **C++**, **Coq**, **Haskell**, **MATLAB**, and **R**.
- Graduate Coursework in Machine Learning, Numerical Analysis, Probability, Monte Carlo Simulation, Partial Differential Equations, Functional Analysis, Randomized Algorithms.

Volunteer Work

- **Volunteer Teacher on Machine Learning**, ATX Diversity Hackathon, September 2018.
- **Scikit-learn Contributor**, SciPy 2018.
- **Volunteer Teaching Assistant**, PyLadies Meetup, Beginner's Python Course, Summer 2013.
- **Volunteer Math Tutor**, UC Berkeley Student Learning Center, 2007-2008.

Academic Talks Given

- **Principles of Logistic Regression with Gradient Descent**, 4th Austin Diversity Hackathon, Austin, September 2018.
- **Alternating Direction Method of Multipliers for the Basis Pursuit Problem**, Program for Women in Mathematics at the Institute for Advanced Study, Princeton, New Jersey, Summer 2011.
- **Weak and Strong Duality in Linear Programming**, SOPHEX Seminar, UT-Austin, Fall 2010.
- **Azuma-Hoeffding Inequality**, <https://vimeo.com/user2723559>, Fall 2009.