# Rachel Chasin

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### **EDUCATION**

## MASSACHUSETTS INSTITUTE OF TECHNOLOGY

M.Eng. IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE June 2013 | Cambridge, MA GPA: 5.0 / 5.0

S.B. IN MATHEMATICS AND COMPUTER SCIENCE AND ENGINEERING June 2012 | Cambridge, MA GPA: 5.0 / 5.0

### **TECHNOLOGIES**

LANGUAGES AND FRAMEWORKS
Python • uWSGI • Pyramid •
Numpy/Scipy/Sklearn/Pandas
Java • Jetty • Jackson • Dropwizard
JavaScript (familiar) • jQuery •
AngularJS

#### **DATASTORES**

MySQL • Cassandra • Redshift / PostgreSQL

## **DISTRIBUTED SYSTEMS**Spark • EMR • Kafka • S3

#### **DEVOPS**

AWS CLI/APIs/console, various services • Puppet (familiar) • Terraform (familiar)

**DEVELOPMENT ENVIRONMENT**Unix • git

## SELECTED EXPERIENCE

#### YELP | SEARCH TEAM | SOFTWARE ENGINEER

August 2017 - present | San Francisco, CA

- Created MVP then fully productionized system to predict business properties from keyword mentions in reviews.
- Used learning-to-rank to train regression models for ranking businesses, released and A/B tested the models online.
- Migrated unspecialized searches from deprecated homegrown system to elasticsearch.
- Improved team tools: ranking model training pipeline (better data persistence, optional use of Spark); qualitative recall/ranking comparison tool.

## YELP | SPAM AND ABUSE DETECTION TEAM | SOFTWARE ENGINEER August 2013 – August 2017 | San Francisco, CA

- Developed and maintained Yelp's centralized service that synchronously detects disruptive or abusive content submitted by users, using a DSL of rules.
  - Major contributor to initial implementation, deployment, migration of existing functionality, validation, documentation, logging, and monitoring.
  - Advised on subsequent major changes to the service, including an asynchronous mode and experimentation support.
- Developed and productionized specialized review quality classifier for businesses without much content.
- Improved infrastructure for spammy or low quality review detection.
  - Introduced Redshift to store data too large for MySQL, cluster soon became a data warehouse and new computation engine for the team.
  - Led a project using Kafka to asynchronously move values of signals as they are computed into multiple datastores (Redshift, Cassandra).
  - Reduced redundant computation of signals when no new data is available.

## **GOOGLE** | RISK ENGINEERING TEAM | SOFTWARE ENGINEERING INTERN June 2012 - August 2012 | Mountain View, CA

- Working at the boundary between a payment fraud detection service and its clients, created a minimal in-memory client fallback for use upon service failure
- Published risk engine responses to an internal publish/subscribe system, with multiple subscribers from other team applications

### RESEARCH

### MIT COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE LAB

CLINICAL DECISION MAKING GROUP | RESEARCH ASSISTANT September 2011 – June 2013 | Cambridge, MA

- Natural language processing research in word sense disambiguation techniques on medical domain text (clinical notes), culminating in a paper and an M.Eng. thesis.
- Published as: R. Chasin, A. Rumshisky, Ö. Uzuner, P. Szolovits. 2014. Word sense disambiguation in the clinical domain: a comparison of knowledge-rich and knowledge-poor unsupervised methods. J Am Med Inform Assoc. http://jamia.bmj.com/content/early/2014/01/17/amiajnl-2013-002133. 2014 Jan 17.