

ARDEN DERTAT

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WORK EXPERIENCE

Pinterest

San Francisco, CA

Ad Ranking - Senior Software Engineer

September 2014 - Present

- Tech lead of Ads Selection and Ads Relevance areas.
- Designed and implemented query expansion service for search ads. Improved revenue and clickthrough rate.
- Rewrote ads indexing and selection. Computed several high-quality signals, increased precision and recall.
- Built machine learned relevance models to calculate query to ad relevance and filter out irrelevant ads.
- Added new features to the click prediction model and improved accuracy. Modeled user to ad relevance.
- Tech lead of audience targeting feature which enabled unique targeting options (press coverage).
- Several double-digit revenue, coverage, and engagement gains. Owner of multiple high-priority work streams.

Microsoft

Bellevue, WA

Bing Ads Core Relevance - Software Engineer II

June 2012 - September 2014

- Developed machine learning models to rank candidate ads for a given query real-time in production.
- Developed tools for training data validation, feature comparison, ranker calibration, and KPI calculation.
- Worked on query, document, and query-document cross features for the ML models.
- Enriched ads with new annotations and improved clickthrough rate. Increased Bing's revenue by 1.5%.
- Improved Bing's relevance metric by more than 8% with less than 0.5% revenue loss.
- Improved CTR by 3% and dwell time by 2% without introducing quick-backs.

Microsoft

Bellevue, WA

Bing Ads Index Generation - Software Engineer Intern

May 2011 - August 2011

- Worked jointly with Index Generation and Relevance on ad landing page related features.
- Added a new data stream to the production index. Saved 25% space without relevance loss.

EDUCATION

Brown University

Providence, RI

MS in Computer Science

2010 - 2012

- **GPA:** 3.8/4.0
- **Specialization:** Information Retrieval, Machine Learning

Massachusetts Institute of Technology

Cambridge, MA

Visiting Student in Computer Science

Fall 2011

- **GPA:** 5.0/5.0
- **Course:** Artificial Intelligence at CSAIL (Computer Science and Artificial Intelligence Laboratory)

Bogazici University

Istanbul, Turkey

BS in Computer Science

2006 - 2010

- **GPA:** 3.3/4.0
- **Specialization:** Computer Networks, Distributed Systems

HOBBY PROJECTS

City Discovery Website

Where2Go - <http://where2g.herokuapp.com/>

- Find out most checked-in places at various cities in multiple categories. San Francisco as an example.
- Discover sights to take photos and view most popular shots clustered on the map. Yosemite as an example.
- Tech stack: Python, Flask, Heroku, Redis, MongoDB, S3, Google Maps/Foursquare/Flickr/500px API.

SKILLS

- **Work Authorization:** Green Card holder.
- **Languages:** Turkish (native), Armenian (native), English (fluent), Spanish (competent)