

# DAMIN ZHANG

103E Southpoint Drive, Amherst, MA 01002

(413) 800-9306 | [daminzhang@umass.edu](mailto:daminzhang@umass.edu)

## EDUCATION

University of Massachusetts Amherst - Amherst, MA

Sep 2015 – May 2019

**Bachelor of Science - Computer Science**

**Minor - Mathematics**

## PROJECTS

### Lipsticks Library

May 2019 – Present

The projects built a dashboard to show the various kinds of lipstick.

- Implemented a combination of gradient map and dot plot to show the color change of different kinds of lipstick.
- Enhanced the interactive by using JavaScript.

### Ph.D. Programs Admission Bias Analysis

Jan 2019 – May 2019

The project used an interactive dashboard present the admission bias in gender and race, and whether the admission criteria are consistently met of top Computer Science Ph.D. programs in United States.

- Used Bootstrap, CSS for static webpage, used d3.js and JavaScript for animation.
- Hand-crafted dataset from current Ph.D. students' CVs, websites, or resumes.
- Visualized the gender and race comparison for bias and admission criteria analyses.
- Visualized the internships and publications for admission criteria analysis.

### U.S. 2018 Congress Vote Prediction

Sep 2018 – Dec 2018

The project aimed to train a naïve Bayesian classifier and a decision tree classifier.

- Perform logarithmic transformation to solve issues with precision when multiplying many small-magnitude numbers together.
- Implemented pruning algorithm to build better trees.

### Insurance Quote Auto-Update

Feb 2018 – May 2018

The project aimed to use machine learning to assist Liberty Mutual customers accessing their updated quote.

- Used Facebook Graph API to access customers' Facebook information and posts.
- Used Python and libraries to analyze customers' data to develop and refine models.
- Used MongoDB to store customers' data and updated quotes.

## EXPERIENCE

### Operations Data Analyst

Jun 2018 – Sep 2018

Agriculture Department – China

- Converted data into actionable insights by predicting and modeling future outcomes.
- Utilized MS SQL, Tableau, Excel, and other dashboard/visualization toolsets for data intelligence and analysis.
- Prepared solution reports to avoid or minimize predicted future negative outcomes effect.

### Data Analyst

Mar 2016 – May 2018

UMass Co-op – Amherst, MA

- Logged and analyzed sales and revenue reports, provide insights on improving efficiency and income.
- Participated establishing new shift schedule by analyzing sales and payroll data from various time range, concluded the most efficient shifts combination in different time range. The result matched with the estimates.

## SKILLS

- Python, Java, C
- HTML, CSS, JavaScript, Django, Bootstrap, Dreamweaver, Adobe Photoshop
- Scala, MATLAB, SQL, Hadoop, PostgreSQL, MongoDB
- Tableau, D3.js
- shell/scripting, Excel