

# Alvin Qicong Deng

## EDUCATION

**UNIVERSITY OF TEXAS**  
**B.S. IN COMPUTER SCIENCE**  
May 2017  
GPA: 3.8

## COURSEWORK

Algorithms and Complexity  
Artificial Intelligence  
Big Data Programming  
Computer Architecture  
Computer Security  
Data Management  
Data Mining  
Data Structures  
Declarative Programming  
Discrete Mathematics  
Linear Algebra  
Operating Systems

## LINKS

Email: [alvin.q.deng@utexas.edu](mailto:alvin.q.deng@utexas.edu)  
Personal: [alvindeng.com](http://alvindeng.com)  
GitHub: [alvin319](https://github.com/alvin319)  
LinkedIn: [alvinqdeng](https://www.linkedin.com/in/alvinqdeng)

## PROJECTS

### PEPPER

Web app that enables students to register for hackathons and corporate representatives to browse resumes

### MEDISYNC

Web app that allows doctors to quickly understand patients' information

## SKILLS

### LANGUAGES

Experience in  
Java, Python  
Familiar with  
SQL, HTML, CSS  
JavaScript, Bash, Git,  $\text{\LaTeX}$   
Exposure to  
C++, C, Ruby, Gremlin

### TOOLS & LIBRARIES

NumPy, SciPy, Pandas, Scikit-learn  
Xgboost, Matplotlib, Seaborn, Flask  
Plotly, jQuery, Bokeh, Jenkins  
Travis CI, Hadoop, Spark, Neo4j  
TitanDB, Cassandra

## EXPERIENCE

### TENFOLD DATA SCIENCE INTERN

Mar 2017 - Present, Austin, TX

- Working with data science team to build up speech recognition analytics

### VAST DATA SCIENCE INTERN

Jan 2017 - May 2017, Austin, TX

- Worked with the data science team to provide inventory insights for car dealerships in Python
- Utilized gradient boosting tree model to predict vehicle view counts and regression model to predict remaining days on lot for vehicles
- Built out an ETL data pipeline to extract price data from Hadoop in Spark
- Implemented a full-stack web application to surface the dealers' inventory and model predictions with Flask

### TWITCH VIDEO RESEARCH INTERN

September - December 2016, San Francisco, CA

- Worked with the video transcode team to improve users' experience on live stream and video-on-demand
- Researched on x264's architecture and multi-threading model to improve latency and video quality in C
- Decreased live stream latency by 13% and increased video quality of live and video-on-demand by 23% and 3% respectively

### APPLE DATA SCIENCE ENGINEERING INTERN

May - August 2016, Austin, TX

- Implemented parameter optimization algorithm to improve machine learning model and built visualizations for metrics like feature importance in Python

### UNIVERSITY OF TEXAS RESEARCH ASSISTANT

Jan - May 2016, Austin, TX

- Worked with Professor Philip Cannata to develop a TitanDB database adapter for CarnotKE, a language agnostic database management system, in Java

### SPREDFAST SOFTWARE ENGINEERING INTERN

May - August 2015, Austin, TX

- Enhanced internal account management web app for the customer success team in Ruby with Rails and JavaScript

### ACTIVISION UI ENGINEERING INTERN

June - August 2014, Shanghai City, China

- Improved the in-game UI & mini-maps of Call of Duty Online in C++

## COMMUNITY INVOLVEMENT

### MOBILE APP DEVELOPMENT LOGISTICS DIRECTOR

May 2015 - Present

- Organize events and conferences that teach students about mobile development with our partner companies throughout the school year

### FREETAIL HACKERS CORPORATE ORGANIZER

May 2015 - December 2016

- Fund-raised \$130,000 for HackTX 2016, the annual hackathon at UT Austin, and 30% increase from 2015