# **Alvin Qicong Deng**

CONTACT Email: alvin.q.deng@utexas.edu GitHub: github.com/alvin319 LinkedIn: linkedin.com/in/alvinqdeng

**EDUCATION University of Texas at Austin**, B.S. in Computer Science - GPA: 3.8 / 4.0 Aug 2014 – May 2017

**EXPERIENCE Drawbridge**, Algorithm Engineer

Jan 2018 – Present

- Experimenting with various deep learning models for user identification and recommendation
- Building software & hardware infrastructure for machine learning in both research and applied
- Publishing machine learning research in user modeling and recommendation systems

## Deeplearning.ai, AI Bootcamp Attendee

Aug 2018 - Aug 2018

- Accepted into the bootcamp for machine learning engineers with a less than 3% admission rate
- Led a group of 5 attendees on the design and implementation of a deep learning computer vision system

**Tenfold**, Data Science Intern

Mar 2017 – Jan 2018

- Developed sentence segmentation model in Python with NLTK and Scikit-learn
- Built KPI dashboards across sales, marketing, and customer success in Python with Plotly

# Drawbridge, Data Science Intern

Jun 2017 – Aug 2017

- Implemented field-aware factorization machine to improve CTR prediction in Python and Scala with Spark
- Analyzed desktop and mobile ad request fraud traffic in Python using Scikit-learn and LightGBM

Vast, Data Science Intern

Jan 2017 – Mav 2017

- Built page view count and remaining days-on-lot predictions using gradient boosting and regression in Python
- Developed an ETL data pipeline to extract vehicle features from HDFS in Python with Spark
- Designed a full-stack web application to surface model predictions in Python with Flask

#### Twitch, Video Research Intern

Sep 2016 – Dec 2016

- Researched on x264 architecture and its multi-threading model to improve video quality in C
- Lowered stream latency by 13% and improved video quality of stream by 23% and VOD by 3%

### **Apple**, Data Science Engineering Intern

May 2016 - Aug 2016

- Implemented grid search algorithm to improve model selection process in Python
- Developed visualization library to display machine learning model metrics in Python with Plotly
- Prototyped data warehouse infrastructure optimization with bloom filter in Java

## **Spredfast**, Software Engineering Intern

May 2015 – Aug 2015

- Redesigned and implemented account management web app in Ruby with Rails
- Leveraged Word2vec to build a web app that identifies relationships between hashtags in Python

# Activision, UI Engineering Intern

May 2014 - Aug 2014

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

## **COMMUNITY**

## Mobile App Development, Logistic Director

May 2015 – May 2017

 Organized events and conferences that teach students on mobile app development with partner companies and venture capital firms such as Google and Andreessen Horowitz

# Freetail Hackers, Corporate Liaison

May 2015 – Dec 2016

• Fundraised \$130,000 for HackTX 2016, the annual student hackathon at UT Austin, and managed partnerships with partner companies and venture capital firms such as Microsoft and 1517

#### **SKILLS**

#### **Programming Languages**

- Proficient in Java and Python
- Familiar with Scala and SQL
- Exposure to C++, C, Ruby, HTML, CSS, and JavaScript

#### Tools

• Linux, Bash, Git, LATEX, Jupyter Notebook, AWS, FloydHub, Hadoop, Spark, Jinja

#### Libraries

 NumPy, SciPy, Pandas, Scikit-learn, Keras, TensorFlow, LightGBM, XGBoost, NLTK, Matplotlib, Seaborn, Plotly, Dash, Bokeh, Flask