# **Alvin Qicong Deng**

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

**EDUCATION University of Texas at Austin**, M.S. in Computer Science

Aug 2019 - Present **University of Texas at Austin**, B.S. in Computer Science - GPA: 3.8 / 4.0 Aug 2014 – May 2017

**EXPERIENCE** LinkedIn, Machine Learning Engineer

Jun 2019 – Present

Designing large-scale graph clustering algorithm to improve probabilistic identity

**Drawbridge**, Algorithm Engineer (Acquired by LinkedIn)

Jan 2018 - Jun 2019

- Built the minimum viable product to improve ads re-targeting and attribution for Safari browsers
- Experimented with multi-task deep learning models for demographic and lookalike classifications
- Developed ML infrastructure tools in both applied research and production
- Led the open-source initiatives on research paper implementation and collaborated with community contributors

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 - May 2017

- Built page view count and remaining days-on-lot predictions with gradient boosting trees and linear regression
- 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**, Applied Research Intern

Sep 2016 - Dec 2016

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

Apple, Machine Learning Engineering Intern

May 2016 – Aug 2016

- Implemented a grid search algorithm to improve the model selection process in Python
- Developed visualization library to display machine learning model metrics in Python with Plotly
- Prototyped data 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 companies and venture capital firms such as Apple, Amazon, and a16z

# Freetail Hackers, Corporate Liaison

May 2015 – Dec 2016

Pitched and fundraised \$130,000 for HackTX 2016, the annual student hackathon at UT Austin, and managed relationships with companies and venture capital firms such as Microsoft, Google, KPCB, and a16z

## **SKILL**

## **Programming Languages**

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

- Linux, Bash, Git, LATEX, Jupyter Notebook/Lab, Hadoop, Spark, AWS, TensorBoard, MLFlow, FloydHub, Jinja Libraries
- NumPy, SciPy, Pandas, Scikit-learn, TensorFlow, Keras, PyTorch, XGBoost, LightGBM, NLTK, Matplotlib, Seaborn, Plotly, Dash, Bokeh, Flask