Alvin Qicong Deng

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

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

EXPERIENCE   **Facet**, Machine Learning Engineer   May 2020 – Present
- Building image segmentation system for content-aware mask generation
- Experimenting with state-of-the-art style transfer with classical graphics techniques

LinkedIn, Machine Learning Engineer   Jun 2019 – May 2020
- Designed a large-scale graph clustering algorithm on web cookies and devices to improve probabilistic identity
- Improved ads auction fairness based on historical bidding data
- Mentored an intern in Summer 2019 researching on graph convolutional neural networks

Drawbridge, Research Engineer (Acquired by LinkedIn)   Jan 2018 – Jun 2019
- Built the MVP to improve ads re-targeting and attribution for Safari browsers which projected $10M ARR
- Experimented with multi-task deep learning models for demographic and lookalike classifications
- Led the open-source initiatives on research 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

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   **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

Tools
- 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