Alvin Qicong Deng

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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++

EDUCATION

University of Texas at Austin, M.S. in Computer Science (part-time) - GPA: 4.0 / 4.0 **University of Texas at Austin**, B.S. in Computer Science - GPA: 3.8 / 4.0

Aug 2014 - May 2017

Aug 2019 - Present

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