# **Alvin Qicong Deng**

**Email:** alvin.q.deng@utexas.edu **LinkedIn:** linkedin.com/in/alvinqdeng **GitHub:** github.com/alvin319 CONTACT **EXPERIENCE Discord**, Senior Machine Learning Engineer Sep 2021 – Present Building ML product for communities, productivity, trust and safety, and more Facet, Machine Learning Engineer May 2020 - Jun 2021 Built image segmentation training/evaluation/inference systems for content-aware mask generation Launched state-of-the-art color grading and style transfers by leveraging cutting-edge deep learning research Served as a generalist to ship ML features end to end (full-stack engineering, marketing, customer support) • Collaborated with executives on the product roadmap to improve product market fit and explore new verticals LinkedIn, Machine Learning Engineer Jun 2019 - May 2020 Designed a large-scale graph clustering algorithm on web cookies and devices to improve probabilistic identity • 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 Mar 2017 - Jan 2018 Tenfold, Data Science Intern 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 - GPA: 3.9 / 4.0 (part-time)

University of Texas at Austin, B.S. in Computer Science - GPA: 3.8 / 4.0

Aug 2019 - Present Aug 2014 - May 2017

## SKILL Programming Languages

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

#### Tools

■ Linux, Bash, Git, IATEX, Jupyter Notebook/Lab, Hadoop, Spark, AWS, GCP, Azure, TensorBoard, MLFlow, FloydHub, Jinja

### Libraries

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