

Alvin Qicong Deng

CONTACT

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EXPERIENCE

Discord, Staff Machine Learning Engineer Sep 2023 – Present

- Building a customer support copilot with macro recommendations and automatic question-answering via LLM-based retrieved-augmented generations, yielding a 20% lift in customer satisfaction
- Leading and advising various cross-team AI efforts to curate novel product experiences with ML

Discord, Senior Machine Learning Engineer Sep 2021 – Sep 2023

- Architected multiple image and video classification and retrieval systems for visual safety, contributing to a 4x increase in detection volume with 90%+ precision in H1 2023
- Launched the first server home feed and iterated from heuristics to modeling, leading to XX% gains in CTR
- Functioned as technical product lead with senior leadership to interview, onboard, and grow new teams and product surfaces across multiple verticals
- Gave numerous technical talks and workshops at department and company levels, familiarizing stakeholders with ML product flywheel and literature reviews across various domains (RecSys/Vision/NLP)

Facet, Machine Learning Engineer May 2020 – Jun 2021

- Built panoptic segmentation systems to generate content-aware masks for large-scale photo editing
- Launched state-of-the-art color grading and style transfer features by combining cutting-edge deep learning research with classical computer 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

SixteenZero, Co-Founder Nov 2018 – Aug 2020

- Built the "Moneyball" analytics product for professional Counter-Strike teams

Drawbridge, Research Engineer (Acquired by LinkedIn) Jan 2018 – Jun 2019

- Built the MVP to improve ads re-targeting and attribution for Safari browsers projected \$XXMM ARR
- Experimented with multi-task deep learning models for demographic and lookalike classifications

Tenfold, Data Science Intern Mar 2017 – Jan 2018

- Developed sentence segmentation model for customer support audio transcriptions

Drawbridge, Data Science Intern Jun 2017 – Aug 2017

- Implemented field-aware factorization machine to improve CTR prediction

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

Twitch, Applied Research Intern Sep 2016 – Dec 2016

- Researched multi-thread x264 architecture to improve video quality by 23%

Apple, Machine Learning Engineering Intern May 2016 – Aug 2016

- Implemented a hyper-parameter search algorithm to improve iteration speed of model selections

Spredfast, Software Engineering Intern May 2015 – Aug 2015

- Leveraged Word2vec to build a web app that identifies relationships between hashtags on Twitter

Activision, UI Engineering Intern May 2014 – Aug 2014

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

EDUCATION

University of Texas at Austin, M.S. in Computer Science - GPA: 3.9 / 4.0 Aug 2019 – May 2022

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

SKILL

Programming Languages

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

Tools & Platforms

- Linux, Bash, Git, \LaTeX , Jupyter, Hadoop, Spark, Beam, AWS, GCP, Azure, TensorBoard, MLFlow, Jinja

Libraries

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