Dan Fu

Senior Software Engineer at ByteDance

Contact

Email: danfu@bytedance.cn
Location: Shanghai, China

Professional Summary

Passionate software engineer with 8+ years experience specializing in machine learning and full-stack development. Currently focused on building scalable AI solutions for enterprise applications.

Education

Ph.D. in Computer Science

Stanford University | 2015 - 2018 | California, USA
Specialized in Machine Learning and Artificial Intelligence. Dissertation on "Deep Learning Approaches for Natural Language Understanding in Low-Resource Settings".

M.S. in Computer Science

University of California, Berkeley | 2013 - 2015 | California, USA
Focus on Distributed Systems and Data Science. Completed thesis on "Scalable Machine Learning Pipelines for Big Data Processing".

B.S. in Computer Engineering

Tsinghua University | 2009 - 2013 | Beijing, China
Graduated with honors. Participated in ACM programming competitions and led the university's robotics team.

Work Experience

Senior Software Engineer

ByteDance | Jan 2022 - Present
- Lead a team of 8 engineers developing machine learning infrastructure for cloud products.
- Architected and implemented a distributed training system that reduced model training time by 40%.
- Collaborated with product teams to integrate AI capabilities into various services.
- Mentored junior engineers and led technical design reviews for critical projects.

Senior Developer

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DataSphere | Mar 2020 - Dec 2021
- Designed and built a real-time data processing platform handling over 10TB of data daily.
- Implemented microservices architecture using Kubernetes, reducing deployment time by 60%.
- Optimized database queries and caching strategies, improving application performance by 35%.
- Led the migration from monolithic architecture to cloud-native services on AWS.

Machine Learning Engineer

TechVision | Jun 2018 - Feb 2020
- Developed computer vision algorithms for autonomous vehicle perception systems.
- Created data pipelines for processing and annotating large-scale image datasets.
- Improved object detection accuracy by 25% through novel deep learning architectures.
- Published research paper on efficient neural network deployment on edge devices.

Technical Skills

Machine Learning (95%), Python (90%), JavaScript/TypeScript (85%), Cloud Services (AWS/GCP) (80%),

Projects

Monolith

A scalable recommendation system built with TensorFlow and deployed on Google Cloud. The system analyzes user behavior to provide personalized content recommendations with 87% accuracy.

Technologies: TensorFlow, Python, GCP, BigQuery

Real-time Analytics Platform

A distributed system for processing streaming data using Apache Kafka and Spark. Features include anomaly detection, real-time dashboards, and automated alerting mechanisms.

Technologies: Kafka, Spark, Scala, Grafana

LinguaLearn Mobile App

An AI-powered language learning application with speech recognition and personalized learning paths. Implemented spaced repetition algorithms to optimize vocabulary retention.

Technologies: React Native, TensorFlow.js, Firebase, NLP

CloudOps Automation Suite

A comprehensive DevOps toolkit for automating cloud infrastructure management. Includes CI/CD pipelines, infrastructure as code templates, and monitoring solutions.

Technologies: Terraform, Ansible, Kubernetes, Prometheus