Ananth Agarwal

ananthag.com ananthag@stanford.edu

Education

Stanford University Expected graduation Fall 2024

Masters of Science in Computer Science
Coursework: Trustworthy Machine Learning, Systems for Machine Learning (in progress), Deep Multi-Task and Meta Learning, Deep Learning for Computer Vision, Natural Language Processing with Deep Learning, Machine Learning with Graphs
GPA: 4.14/4.0

University of California, Berkeley August 2016 - May 2019

BS, Honors in Electrical Engineering and Computer Sciences
GPA: 3.863/4.0

Work Experience

Google Core Machine Learning, Software Engineer April 2022 - present

1. Google Brain LaMDA training, serving, and safety infrastructure for Bard (conversational AI) development and launch
2. ML infrastructure for training large models (> 1B parameters) using open-sourced libraries such as Pax and Fiddle
3. Dual Encoder (two-tower) model development in collaboration with Search MUM (Multitask Unified Model) and Research teams

Google TV, Software Engineer July 2019 - April 2022

User personalized content full-stack development

Amazon Web Services, Software Development Engineer Intern May 2018 - August 2018

AWS Elemental MediaPackage team

Research Experience

Stanford NLP Group September 2023 - Present
Professor Christopher Manning's lab

FrameNet Research Apprentice, Intl. Computer Science Institute February 2019 - July 2019
Mentored by Dr. Collin F. Baker

Publications

Eric Mitchell, Joseph J. Noh, Siyan Li, William S. Armstrong, **Ananth Agarwal**, Patrick Liu, Chelsea Finn, and Christopher D. Manning (2022). "Enhancing Self-Consistency and Performance of Pretrained Language Models with Natural Language Inference". In: ***Oral (4% of submissions)***, *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Association for Computational Linguistics. URL: https://ericmitchell.ai/concord.pdf.

Projects

Specializing Common Representations in Multi-Task Learning Paper

In collaboration with Christopher Fifty, Stanford PhD student

Improving Training Efficiency for Computer Vision Tasks Paper

In collaboration with Jonathan Frankle, Chief Scientist at MosaicML

Predicting Drug-Drug Interactions using Graph Neural Networks Medium Post

Listed as a featured tutorial on the Stanford CS 224W Graph ML Tutorials Medium page and as a featured example blog post in the Winter 2023 CS 224W project instructions for students

Teaching

Code In Place (CS 106A) Section Leader, Stanford University March 2021 - May 2021

CS C100 Principles and Techniques of Data Science, UC Berkeley May 2018 - May 2019

Undergraduate student instructor and online course textbook contributor

theCoderSchool Berkeley Code Coach January 2017 - May 2018

Individual and group instruction teaching introductory computer science

Awards

Google Platforms & Ecosystems Award Honorable Mention

Team of four people awarded both in Q3/Q4 2021 and Q1/Q2 2022 for Google TV new feature launches and substantial Android app quality improvements

Google TV Hackathon 2021 Third Place

Team of six people received third place in a Google TV organization-wide hackathon for an innovative new feature we demoed for the Google TV platform

UC Berkeley Honor Societies

Selected for Eta Kappa Nu (EECS honor society) and Tau Beta Pi (Engineering Honor Society)