Jiahui (Karen) Chen

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https://jiahuikchen.github.io/

Education

UNIVERSITY OF UTAH
B.S. in Computer Science, Minors in Math and Cognitive Science – May 2020
Graduated Cum Laude. Recipient of the President's Scholarship, Regents' Scholarship, and Bingham Alumni Scholarship

Languages/Skills: Python, PyTorch, Java, C#, C++, JavaScript, TensorFlow, LaTeX

Technical Experience

SOFTWARE ENGINEER – META

December 2022 to Present: Generative AI Expressive Media Team

– Creating and evaluating text to image models (Dalle2, Imagen, Latent Diffusion) for use cases across Meta products.
– Developing pipelines and metrics for evaluating generative models via human annotations of AI-generated images.
– Exploring prompt engineering and expansions, to bridge the gap between user searches (abstract, short) and usual AI-generated image prompts (descriptive and specific, imaginative).

July 2022 to November 2022: Bayesian Modeling Team

– Applying Bayesian statistical modeling and inference, through an in-house probabilistic programming language, to Meta's A/B testing infrastructure.
– Implementing Bayesian optional stopping to end experiments early when they are predicted to result in no improvement or regression in metrics, saving revenue and resources.

June 2020 to July 2022: Probabilistic Neural Networks Team

– Researched methods for increasing the robustness and trustworthiness of machine learning systems by ascribing uncertainty measurements to models.
– Developed a PyTorch-based library of these uncertainty methods for deep learning.
– Main developer for the Benchmarking sub-library, an experimentation platform that allows users to simulate uncertainty in data, add uncertainty methods to models, and run uncertainty-aware experiments on simulated and SOTA benchmark datasets.
– Applied UQM to anti-scraping and computer vision models in Meta products.

SOFTWARE ENGINEERING INTERN – INSTAGRAM (META)
May 2019 to August 2019
Created computer vision models that detect guideline-violating media. Designed and implemented auto-machine learning thresholding infrastructure that decreased the amount of non-violating media deleted off Instagram. Deployed the models and infrastructure at massive scale (across all of Instagram).

EXPLORE INTERN – MICROSOFT AI & RESEARCH ORG
May 2018 to August 2018
Constructed a table parsing system, as part of a webpage parsing pipeline, that used machine learning to find subject properties in tables and rule-based parsing to obtain corresponding subject values. Improved existing table parsing coverage by 2.6 times at 95% accuracy.