Proposal for a talk in the Applied ML Management in KDD

https://wamlm-kdd.github.io/wamlm/index.html

Title:

Who writes prompts? Who creates training data? Who does model-fine-tuning? Setting a durable partnership structure between AI and partner teams in the world of GenAI

Abstract:

GenAl has blurred the roles and responsibilities between Al and partner teams. In traditional ML efforts, Al trains models and PD teams integrate those models; everyone has clear roles and responsibilities. In GenAl, prompt engineering and fine-tuning models - at the surface - appear highly accessible to non-ML experts. Training datasets are easy to curate and many vendors are providing simple fine-tuning endpoints which are accessible to software engineers. It is now easy for software engineers to create an Al POC. When the decision is made to go from POC to production we need to figure out where and how to bring Al specialists into the project.

At Intuit, we have defined Squads, a partnership model between a centralized AI organization and our product and engineering partners. The Squad model defines the roles and responsibilities of each function in the cross org AI projects, as well as meeting structure and how to share reporting responsibilities to separate sets of leaders. By defining a durable model which we can apply to new projects, we are ensuring that the pain points we experienced in early GenAI efforts are not repeated in subsequent efforts. In this talk we plan on describing the Squad model and the motivations behind decisions made in the model.

Potential discussion points:

Should prompt engineering be done by just data scientists?

How do we evaluate end-to-end applications so everyone is aligned on performance metrics? When fine-tuning models, who collects the data?

Who trains the model?

How do we set up projects for success, so everyone has clear alignment on their roles? Should Data Scientists join daily standups? Should we track DS work in the same way SWE work is tracked?

How do we handle written communication? What conversations happen in shared channels and what conversations happen in function-specific channels?

Relevance to workshop

GenAl's popularity and accessibility has upended the traditional working relationships between AI, Software Engineers, and PMs. Producing demo-ready AI code used to require significant AI expertise. Now, anyone can create a working demo with a well-engineered

prompt. As a result, the traditional roles and responsibilities across AI projects require re-addressing in the context of GenAI. Figuring out how to navigate these complex and changing dynamics is directly relevant to the topic of the workshop.

Info about the presenter:

Conrad De Peuter is a Senior Staff Data Scientist and Manager at Intuit. He has worked on deep learning models in the document understanding space, as the <u>Al lead for special projects on delivering faster tax experiences</u>, and most recently as the lead for a portfolio of product-focused R&D projects at Intuit.

Joy Rimchala is a Principal Data Scientist leading AI research and innovation in domains including document services and AI safety. Joy's current focus is to scale and enhance AI native capabilities – enabling scalable, secure, and compliant document intelligent service. In addition to document understanding, Joy has served as one of the lead architects in AI safety. Joy has presented her works at WiDS, NVIDIA GTC, and O'reilly AI Conference and NeurIPS workshops. Joy has served as a program committee and a reviewer at leading conferences including ACL, EACL, EMNLP, and AACL-IJCNLP. Joy holds a PhD in Biological Engineering from MIT with a focus on parameter estimation methods in cell decision processes.

Info about the company

Intuit is a leading financial software company that helps millions of individuals, small businesses, and accountants manage their finances. Their innovative tools and services, such as QuickBooks and TurboTax, simplify complex financial tasks and improve productivity. Intuit is focused on creating intuitive, accessible, and reliable solutions to drive financial success for their customers.