Wen Xing

She/Her | San Francisco Bay Area | wen.xing.us@gmail.com | (650) 666-5695 | https://wenx.io

SUMMARY

I'm an AI research engineer dedicated to AI Safety, focusing on aligning technology with our societal values. I'm skilled in scalable research engineering. I work on important problems without clear answers in both engineering and research.

EXPERIENCE

Independent AI Research Engineer 2024 - present

- Conducting research on <u>automatic AI safety research agents</u> in AI Safety Camp
- Conducted research on SAE-driven auto steering during a Apart Research Hackathon
- Conducted AI Mechanistic Interpretability research on open problem such as Large Language Models (LLM) <u>Efficient Sparse Autoencoder feature splitting</u>
- Developing expertise in AI safety through research programs such as AI Safety Camp, Apart Research Hackathon, and ARENA course at the Recurse center

Zitara Technologies — Head of Platform Software 2023

- Built up the software department from 4 to 10 members, growing a single team into three specialized teams: Lab Development, Web Development, and Core Software
 - Led technical recruitment and organizational development by hiring 6 key engineering talents, creating cross-functional onboarding processes, and establishing robust software development practices including code reviews and regular deployment cycles.

Zitara Technologies — Staff Software Engineer 2021 - 2022

- Scalable Battery Model Research and Validation Infrastructure
 - Developed a distributed research infrastructure on AWS EC2 for advanced state-of-charge (SoC) and state-of-health (SoH) battery modeling, leveraging a scalable workflow and parallel processing to accelerate high-fidelity simulations across diverse conditions. This infrastructure was crucial for model launch in 2022.
 - Optimized data storage and retrieval using S3, ensuring efficient handling of large datasets and experiment results for analysis and reproducibility. Utilized Python,
 Pandas, SQLAlchemy, and other AWS services to streamline data processing, automate workflows, and support iterative research and development.
 - Collaborated closely with researchers to rapidly develop research tools for battery modeling research, such as visualizing model performance over time
 - Led and contributed to codebase development and maintenance, ensuring robust, reproducible, and well-documented research pipelines
 - Coordinated weekly with both the research and engineering team, driving project planning, execution, and technical decision-making.

Meta - Civic Integrity Team — Machine Learning Eng Tech Lead 2019 - 2021

- Misinfo Interventions
 - Designed, analyzed, and launched several core ML ranking interventions that stabilized the Facebook ecosystem during US and other global elections. Some of this work was reported in a WSJ podcast and a NYTimes article.
 - Convinced reluctant product organizations to adopt changes.
- Analysis and Experimentations

- Conducted ML ranking and misinfo analysis, investigations, and experimentations.
- o Presented insights weekly to directors from several organizations.

• Emergency Monitoring

 Built up and co-led a 15 person monitoring team across four organizations to assess and handle unprecedented risks during critical times. This was a first in Facebook and in the industry.

Meta - News Product Team — Tech Lead 2017 - 2019

• Core Engineering and Leadership

- Architected and continuously improved Instant Articles mobile infrastructure, focusing on product performance, code reusability, and developer experience (Instant Articles was then adopted by over 10,000 publishers worldwide *).
- Built an iOS team in the News org from the ground up, supported multiple product teams inside the News org including Local News, News Credibility, Breaking News, and Instant Articles.
- Established standards of experimentation process across the News org.

• Product Leadership

- Co-founded Social News team. Built and grew a team to focus on social interactions, including reactions and conversations around news, and sharing news.
- Collaborated with design, product management, data science, and research to convince News leadership that social interaction around news is worth investing in
- Planned roadmap for Social News zero-to-one stage, and led experiments that validated the value of this investment. As a result, we doubled the size of the team.

• Mentorship and Recruiting

- o Mentored junior engineers on the News team.
- o Participated in company and team recruiting.
- Taught iOS classes as part of Facebook iOS Academy.

Meta - App Infrastructure Team — Software Engineer IC 2015 - 2017

- Developed and launched an internal full-stack mobile framework in collaboration with a
 core product team (based on the open-sourced ComponentKit, a React-inspired view
 framework for iOS).
- Standardized the company's mobile performance logging, reducing redundant efforts.

Meta - B2C Commerce Team — Software Engineer IC 2013 - 2015

- Integrated the backend with payment processors.
- Developed the first iteration of Facebook B2C products.

EDUCATION

Rice University — *Bachelor of Science in Computer Science* 2009 - 2013 Applied Math Focus

PROGRAMMING AND NATURAL LANGUAGES

Python, PHP, Objective-C, Javascript, C++, C; English, Mandarin Chinese

FRAMEWORKS & TOOLS

PyTorch, AWS, EC2, S3, Terraform, Flask, SQLAlchemy, Boto3, Pandas, Numpy, Hive, Jupyter, Einops, Git, Mercurial, Github Actions, React, Bootstrap, etc

HOBBIES AND INTERESTS

Competitive Powerlifting, California Impressionist Landscape Painting, Rock Climbing