

Sheng Yang

SKILLS

- Programming language: Python (PyTorch, Keras, Numpy, Pandas, Scikit-learn, Scipy, Matplotlib, HuggingFace), SQL (Presto, Hive), C++
- AI/ML: Deep learning, Recommendation system, Natural language processing, Pattern Recognition, Data Science, Data Analysis, Statistics
- Software Engineering: AWS, Linux, Git

PROFESSIONAL EXPERIENCE

Udemy, Inc.

July 2024 - Present

Senior Data Scientist

- Reduced **95% runtime (17x faster)**, saving ~\$10,000/yr on AWS instances, by optimizing SQL queries and collaborating with data analysis team to profile runtime and identify optimization opportunities.

Walgreens Boots Alliance

May 2023 - April 2024

Senior Data Scientist

- Increased top-100 **purchase recall by 30%**, by building personalized recommendation systems for Walgreens online retail website, and user history features and pipelines conducting TB-scale data processing, using HuggingFace Transformers (Mistral), PySpark on Azure, LangChain, Faiss

Meta Platforms, Inc.

Research Scientist

Aug 2022 - Jan 2023

- Developed **FB user history models**, by analyzing time series features distribution, and experimenting with attention-based model variants on distributed training clusters, using SQL and TorchRec

Machine Learning Ph.D. intern

May 2021 - Aug 2021

- Increased **0.5% engagement time for FB Reels**, by designing auxiliary objective modules for FB Reels ranking system, using attention-based models with sparse (embedding) and dense features, data augmentation (two towers) retrieval models, relevant metrics allowing real-time monitoring of the performance of models.

University of Illinois Urbana-Champaign

Aug 2016 - Aug 2022

Graduate Researcher

- Developed ML model adopted by a **2.5 M collaborative proposal to the DOE**, for reconstructing nuclear collision event for a 2D array detector, by building data pipeline on a High Throughput Computing (HTC) distributed cluster, using convolutional neural networks in Keras

EDUCATION

University of Illinois at Urbana-Champaign

IL, U.S.A

Ph.D., Nuclear, Plasma, and Radiological Engineering, GPA: 3.72/4.00

Aug. 2016 - Aug. 2022

National Tsing-Hua University

Hsinchu, Taiwan

Master of Science in Nuclear Science, GPA: 4.01/4.30

Jun. 2014

Bachelor of Science in Physics and Nuclear Science, GPA: 3.48/4.00

Jun. 2012