Sachinda Edirisooriya

https://sachindae.github.io/
sedirisooriya10@gmail.com (480) 643-9559 Seattle, Washington

Education

University of California San Diego | M.S. Computer Science | 3.9 GPA Sep 2021 - Dec 2022
University of California San Diego | B.S. Computer Science | 3.9 GPA Sep 2018 - Jun 2021

Work Experience

Annapurna Labs (AWS) | Machine Learning Engineer | Seattle, WA Jul 2025 - Now

- Working on the LLM inference team to optimize inference of PyTorch models on ML accelerators (Trainium)

Amazon| Machine Learning Engineer | Seattle, WA Sep 2023 - Jul 2025

- Worked on the **Amazon Music ML** team to build the core models for personalized music recommendations
- Designed and built system for cold-start item recommendation with instant reflection upon availability
- Implemented and optimized **Spark** ETL jobs and transformer model online inference (**PyTorch**)
- Integrated large scale data pipelines with data catalog using **Typescript**, **Python**, and **AWS**
- Built **A/B testing** capabilities into model serving microservices in **Java**, unblocking ML model improvements

SpaceX | Software Engineer | Redmond, WA May 2023 - Sep 2023

- Worked under the **Starshield** team to develop satellite software and manage **HITL** testing infrastructure
- Wrote platform and application code using **C++** for satellite components

Amazon | Software Development Engineer Intern | San Francisco, CA Jun 2022 - Sep 2022

- Worked under the **Amazon Music ML** team to develop and implement experiments using **Python**, **Java**, **Typescript**, and **Spark,** aimed to improve Amazon Music artist recommender systems
- Implemented an end-to-end automated pipeline built using **AWS services** to efficiently run a **machine learning algorithm** on hundreds of millions of customer data points
- Deployed an A/B test to **millions of Amazon Music customers** to evaluate the impact of popularity bias on a similar artist recommender

UC San Diego | Research Assistant (Hao Su/Taylor Berg-Kirkpatrick) | San Diego, CA Sep 2020 - Jun 2022

- Conducted research in the field of optical music recognition (OCR for music) using **Python** and **PyTorch,** receiving the highest distinction award from UCSD
- Built a **large-scale dataset** (>100,000 samples) of paired sheet music images and corresponding symbols
- **Published** a new state-of-the-art approach to optical music recognition in **ISMIR 2021** (40% acceptance)
- Experimented with usage of **LLMs** and word embeddings to perform zero-shot image tasks using **PyTorch**

NVIDIA | Computer Architecture Intern | Santa Clara, CA Jun 2020 - Sep 2020

- Worked under **Tegra Hardware** team to improve safety and security of the Tegra SoC using **Python**
- Led the development of new chip documentation process to prevent leaking confidential information to customers, and automatically generate human-readable output in **HTML**
- Wrote scripts to check for style violations and incompatibilities in architecture documents to meet **ISO 26262** specifications

Projects

Yip | Full-Stack Developer | gitlab.com/cse110-sp20/yip Mar 2020 - Jun 2020

- Developed a user-driven review website inspired by Reddit using **Rust**, **React**, and **PostgreSQL**
- Implemented entire backend including **API/database functions** using **Rust**, and architected the project
- Built a live messaging system between users for the website (hosted on **AWS EC2**)

Publications/Skills

Sachinda Edirisooriya, Hao-Wen Dong, Julian McAuley, and Taylor Berg-Kirkpatrick, “An Empirical Evaluation of End-to-End Polyphonic Optical Music Recognition,” Proceedings of the 22nd International Society for Music Information Retrieval Conference (**ISMIR**), 2021. (Paper)

Skills: Java, Python, TypeScript, C/C++/C#, Assembly, PyTorch, Spark, CUDA, AWS