

EDUCATION

Carnegie Mellon University - BS Computer Science, Additional Major in Statistics

2012 - 2016

- GPA: 4.0
- Notable Coursework: Operating Systems, Compiler Design, Distributed Systems, Probability and Computing, Machine Learning, Data Analysis
- SAT (college admission): 2400 / 2400

AI EXPERIENCE

Llama-Adapter April 2023

- Contributed to the Hugging Face Parameter-Efficient Fine-Tuning (peft) library.
- Implementation of the Llama-Adapter by Zhang et al. that finetunes Llama using a set of learnable gated adaption prompts.
- https://github.com/huggingface/peft/pull/268

RobustFill Winter 2019 & 2023

- Implemented a neural network by Devlin et al. that synthesizes a program in a string manipulation DSL based on a few examples of input-output string pairs.
- Trained on 4 x NVIDIA Tesla P4 using PyTorch's Distributed Data Parallel.
- https://github.com/yeoedward/Robust-Fill
- https://huggingface.co/eddvveo/robustfill

Neural Turing Machine

Spring 2016

- Implemented a type of recurrent neural network that makes use of explicit memory and attentional processes (by Graves et al.) using TensorFlow.
- https://github.com/yeoedward/Neural-Turing-Machine

DATA EXPERIENCE

Blockchain Data Engineering

Founder

March 2022 - Jan 2023

- **Mixpanel for web3**: Data analytics platform for protocol developers to auto-generate metrics dashboard based on blockchain schema.
 - Built for terabytes of Solana data with the following systems:
 - BigQuery as the data warehouse
 - Prefect + Kubernetes for orchestration
- **Data3.Wiki**: Catalog of web3 projects and smart contract metadata.
 - Bootstrapped, hired and managed team of 3:
 - Frontend and backend engineers
 - Designer

Ricci.sg

Founder

January 2021 - Present

• News service that scrapes and aggregates news published in the Chinese language from a wide variety of sources with learning aids for people who are studying Chinese.

Software Engineer

- Worked on data engineering:
 - o Data pipelines for the alternative data group.
- Worked on greenfield data platform projects:
 - o Bitemporal knowledge graph platform
 - Service layer over SQL database to version graph data along two dimensions of time.
 - Entity linking service
 - Mapping various entities of interest like companies, people, etc. to canonical identifiers.
 - Data pipeline orchestration system
 - Encourage data scientists to share data by making it easy to deploy pipelines and share the resulting data.

Facebook - New York, NY

Summer 2015

Software Engineering Intern

• Worked with the newsfeed data team to build an internal user clustering tool.

Google - Mountain View, CA

Summer 2014

Software Engineering Intern

• Worked on the Similar Hotels feature in Google's Hotel Finder. Code was pushed to production as an experiment at the end of the summer.

Infosys - Bangalore, India

Summer 2012

Software Engineering Intern

• Worked on a mobile web application for monitoring electrical usage in office buildings.

SYSTEMS EXPERIENCE

Operating System Kernel

Fall 2014

• Wrote a Unix-inspired kernel from scratch, but excluding the file system. Was provided with the boot loader and various utility code like kernel malloc.

Compiler Fall 2015

• Implemented a compiler for co, a safe subset of C, with a semi-conservative "stop-the-world" mark-and-sweep garbage collector. The compiler was written in OCaml and the runtime in C.

Distributed Systems

Spring 2014

• Implemented a client/server protocol on top of UDP for distributed hashing. Implemented a distributed key-value store with consistent hashing. Implemented a distributed music playlist using paxos, with synchronized music playback. The playlist was voted best final project.

N-Store: Database for Non-Volatile Memory

Spring 2015

• Worked with a graduate student in CMU and contributed to the design and early implementation of the tile-based execution engine.