

Yi Hu

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EDUCATION

Carnegie Mellon University

Master of Science in Computer Science and Integrated Innovation for Products and Services

Pittsburgh, PA

Aug 2022 – May 2024

Georgia Institute of Technology

Bachelor of Science in Computer Science - concentration in Intelligence and Info-Internetworks

Atlanta, GA

Aug 2018 – May 2022

EXPERIENCE

Software Engineer Intern

May 2023 – Aug 2023

CMU Variability Lab

Pittsburgh, PA

- Partnered with Prof. Andrew Begel to integrate video conferencing into Scratch using Zoom's Video SDK, APIs and webhooks, adding multi-participant video, audio, active speaker highlight, chat, and cloud recording features
- Introduced a host control mechanism and a customizable video visibility option for participants
- Designed entire user interface using Figma; made design changes iteratively that caters to the needs of neurodivergent students. Used React.js for frontend development that integrates with Express.js backend
- Received high praise from Prof. Begel for software development skills, design expertise and collaborative efforts

Software Engineer Intern

Aug 2020 – Dec 2020

Chinese Academy of Sciences

Beijing, China

- Led the PyTorch team of 3 interns to develop a distributed machine learning model training system that can train a model on multiple machines simultaneously
- Conducted tests to evaluate and adjust the performance of ResNet50, SSD, and YOLOv3 models on the system
- Coded programs that automatically transfer a single machine training script to a script that can train on multiple machines
- Created user manual for end users to install environment, upload model, and utilize the system

PROJECTS

Interview | Founder

July 2023 – Now

- Founded Interview, an innovative platform that delivers AI-powered personalized feedback to help job applicants better prepare for interviews in realistic mock sessions
- Directed a diverse team of 7 people, spanning software development, UI/UX design, and marketing, ensuring code quality, architecture design, and the seamless integration of various technological components
- Spearheaded the integration of OpenAI's API for accurate audio transcription, coupled with LangChain and prompt engineering, to provide AI-driven, personalized interview feedback
- Developed the platform with the adoption of Django for a stable and scalable backend, while ensuring a seamless and responsive user interface with React on the frontend
- Worked closely with the UI/UX designers to translate user feedback, needs and insights from market analysis into actionable design improvements

Backend Full Stack Project - Twitter | Developer

July 2023 – Sep 2023

- Tech Stack: Python, Django, MySQL, Hbase, Redis, Memcached, Amazon S3
- Used push model to fanout news feeds
- Used Redis and Memcached to reduce database queries for tables characterized by high reads and low writes
- Utilized key-value store HBase to split high-write, low-read tables, enhancing database efficiency
- Implemented denormalization to store the number of comments and likes to reduce database queries
- Used Message Queue to deliver asynchronous tasks to reduce response time
- The entire project resulted in more than 10,000 lines of code modifications, and spanning 3 months

DLC Modular Park | Project Lead

Jan 2023 – May 2023

- Leveraged the Integrated Product Development process to strategize and execute the conversion of abandoned mine lands into community recreational modular park
- Conducted 50+ interviews and co-design sessions with local residents. Hosted iterative surveys and workshops to refine the Modular Park's design based on community feedback
- Analyzed product opportunity gaps and conducted a comprehensive competitive landscape and stakeholder analysis to position the DLC Modular Park project for success
- Received high praise and recognition from the Vice President of Duquesne Light Company for the project's innovation, execution, and potential community impact

SKILLS

- * Languages: Java, Python, JavaScript, TypeScript, C, C#
- * Frameworks: Django, React.js, PyTorch
- * Tools: Linux, Git, IntelliJ, PyCharm, VS Code, Figma, Relational Databases
- * Non-tech: Ski, Texas Holdem(CMU Poker Club)