Jun (Jonathan) Hu

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EDUCATION

Cornell University

GPA: 4.0

Master's in Computer Science, Specialization in Large Language Models and AI

Aug 2023 - Jan 2025

o Coursework: Large-Scale ML, Robot Learning, HCI, NLP, CV, Deep Learning, Distributed Systems, Parallel Computing.

University of British Columbia

GPA: 4.33

Bachelor of Commerce, Combined Major in Computer Science and Business

Sep 2020 - May 2023

• Academic Ranking: 1st among all program peers, 5th in faculty (Top 0.5% of 908 students).

o Distinction: Accelerated a rigorous four-year program, completing all requirements in three years—a program's first.

WORK EXPERIENCE

Amazon Web Services

Vancouver, Canada

Software Development Engineer Intern

May 2023 - Aug 2023

- Implemented a scalable interface for generating and publishing customized **workflow and alarm metrics** to AWS CloudWatch, resulting in its adoption by **20+ internal teams** and a **10x increase** in number of metrics available.
- Spearheaded the engineering and deployment of a TypeScript package for **streamlining infrastructure deployment** via AWS Cloud Development Kit (CDK), seamlessly integrating with Amazon EC2 to dynamically optimize compute resources.
- Exceeded internship objectives by addressing critical issues in on-call operations. Extended the project scope to include a comprehensive redesign of documentation infrastructure, significantly cutting down average ticket resolution time.

Cornell University

Ithaca, New York

Research Assistant, Machine Learning Engineering

Sep 2023 - Jan 2024

- $\circ \ \, {\rm Trained \ and \ fine-tuned \ a \ multi-modal \ language \ model \ for \ a \ restaurant \ recommendation \ engine \ using \ PyTorch.}$
- Developed Flask and Node.js backend services, integrated MongoDB, and built a chatbot interface with GPT-4 and LangChain. Conducted A/B testing and successfully launched Android application, achieving over 100 installations.

University of British Columbia

Vancouver, Canada

Lead Teaching Assistant

Dec 2020 - May 2023

- Collaborated with faculty to deliver Computer Systems, Algorithms, and Software Testing courses to 2,800+ students.
- Spearheaded training initiatives for 80 teaching assistants, elevating the department's instructional quality.

Shenzhen Youpin Cosmetics Tools Co., Ltd.

Remote

 $Software\ Development\ Engineer$

Jan 2022 - Jul 2022

- Secured and executed a \$12,000 contract to develop and deploy an inventory management app using Java and MySQL.
- Centralized inventory management across departments, saving 1000 labor hours yearly and decreasing errors by 10%.

RESEARCH AND PROJECT EXPERIENCE

- DeepReads: Enhancing Retrieval and Summarization in Large-Scale Literature Data Jan 2024 Present
 - o Actively investigating and enhancing the state-of-the-art retrieval models under Professor Tanya Goyal's guidance.
 - o Mining and extracting data from articles and literary websites to construct extensive, high-quality datasets.
- Subgoal Estimation for Enhanced Decision Making in Human-Robot Interactions 🕏 Sep 2023 Dec 2023
 - Developed a subgoal estimation algorithm for human-guided robotic followers using **TurtleBot**, **ROS** and **Python**, significantly enhancing path-following accuracy and collision avoidance in dynamic environments.
 - Conducted a comprehensive evaluation study, demonstrating the superiority of the **subgoal estimation** approach over traditional velocity-based prediction methods in terms of **adaptability** and **user satisfaction**.

• Job Central: Full-Stack University Job Application Portal 🗘

Feb 2022 - Apr 2022

- Designed and launched a robust full-stack job search portal, utilizing **Spark** for backend operations, **PostgreSQL** for scalable data storage, and **React** for an interactive user interface, enhancing user engagement and experience.
- Engineered dynamic RESTful APIs to facilitate efficient CRUD operations and complex search functionalities.

LEADERSHIP EXPERIENCE

Cars and Hoops Foundation %

Vancouver, Canada

Vice President of Operations

Nov 2021 - Present

o Orchestrated fundraising campaigns that raised over \$360,000 for Canuck Place Children's Hospice.

Varsity Basketball %

Richmond, Canada

BC Regional MVP 2020, Richmond City League All-Star 2020

Sep 2015 - May 2021

SKILLS SUMMARY

• Languages: Python, C, Golang, C++, Java, R, SQL, Typescript, Javascript, HTML, CSS

• Technologies: TensorFlow, PyTorch, Keras, Numpy, Matplotlib, Flask, OpenCV, Pandas, Spark, Docker, AWS, Git, Node.js