Jun Hu github.com/jjunhu/ 🖸 jjunhu.github.io/

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Work Experience

Amazon.com

Vancouver, Canada July 2024 - Present

Software Development Engineer Intern

• Developing automated workflow solutions on the Payment Bridge team to optimize transaction processing.

Cornell University

Ithaca, New York

Graduate Student Researcher 🖸 🖸 Sep 2023 - July 2024

- Built an automated pipeline using retrieval followed by entailment models for claim verification in extensive long documents.
- Demonstrated new end-to-end approach to training retriever models using summarization models, outperforming current state-of-the-art pre-trained retrievers across multiple benchmarks.
- Fine-tuned bi-encoder language model for restaurant recommendation app using **PyTorch**, securing over 100 installations.
- o Developed Flask and Node.js backend services, integrated MongoDB, and built chatbot interface with GPT-4.

Amazon Web Services

Lead Teaching Assistant

Vancouver, Canada

Software Development Engineer Intern

May 2023 - Aug 2023

- Implemented scalable interface for creating customized metrics that consolidate traffic of 10 Million global transactions.
- Streamlined infrastructure deployment by integrating AWS CDK, saving \$260,000 annually in salary expenses.
- Exceeded internship objectives by redesigning **Typescript** documentation, reducing ticket resolution time by 50%.

University of British Columbia

Vancouver, Canada

Dec 2020 - May 2023

o Designed and implemented Jupyter Notebook problem set for training transformer model end-to-end to generate humorous captions, earning one of ten Undergraduate Teaching Assistant Awards for exceptional contribution.

Youpin Cosmetics Co., Ltd.

Vancouver, Canada

Software Development Engineer Intern

May 2022 - Aug 2022

• Centralized inventory management by building app in Java and MySQL, saving 10,000 labor hours across all departments.

EDUCATION

Cornell University

GPA: 4.0

Master of Engineering in Computer Science, Specialization in Large Language Models and AI

Aug 2023 - Aug 2024

University of British Columbia

Bachelor of Commerce, Combined Major in Computer Science and Business

Sep 2020 - May 2023

• 1st in the program, 5th in faculty (**Top 0.5%** of 908 students), first ever to complete the dual-degree two years early.

Technical Projects and Research Papers

• CarSim, Randomized multi-model approach to autonomous driving $\Omega \triangleright$

Jan 2024 - May 2024

- Trained CNN behavior cloning model and applied DQN and PPO algorithms to win first place out of 48 project submissions.
- BiteWise, Smart assistant for restaurant owners •

Oct 2023 - Jan 2024

- Built retriever model to extract relevant reviews from Yelp and integrated with GPT-4 API to generate actionable insights.
- Turt-Navigation, Human-guided route learning for robotic followers respectively.

Sep 2023 - Dec 2023

• CVR, York University vision science summer research program | Site

Feb 2022 - Jun 2022

Jul 2023

• Job Central, Full-stack university job application portal •

o Designed and launched full-stack job search application with RESTful APIs using Spark, PostgreSQL, and React.

LEADERSHIP EXPERIENCE

Cars and Hoops Foundation | Site

Vancouver, Canada

Vice President of Operations, Raised over \$300,000 for Canuck Place Children's Hospice

Nov 2021 - Present

Varsity Basketball | Site

Richmond, Canada

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

Sep 2015 - May 2021

TECHNICAL SKILLS

• 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

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