Jonathan Hu

jjunhu.github.io/ ⌕
github.com/jjunhu/ ⌕

jonathanjun.hu@gmail.com
1 (607) 339-1279
linkedin.com/in/jjun-hu/ ⌕

EDUCATION

Cornell University **GPA: 4.0**
Master of Engineering, Computer Science; Specialization in Artificial Intelligence *Aug 2023 - Dec 2024*

University of British Columbia **GPA: 4.0**
Bachelor of Commerce, Combined Major in Computer Science and Business *Sep 2020 - May 2023*
- **Academic Standing**: Ranked 1st among program peers, 5th in faculty (**Top 0.5%** of 908 students); expedited graduation in 3 years—a program first.
- **Relevant Coursework**: Advanced courses in Machine Learning, Artificial Intelligence, Distributed Computing, Algorithms, Networking, and Project Management.
- **Scholarships & Awards**: Dean's Honour List; Outstanding Student Entrance Scholarship (**$20,000**); 2 x Sauder School of Business Scholarship (**$10,000**); 2 x Trek Excellence Scholarship (**$4,000**); Naomi Grigg Scholarship (**$955**).

WORK EXPERIENCE

Amazon Web Services ⌕ Vancouver, Canada
Software Development Engineer Intern *Apr 2023 - Aug 2023*
- Enhanced business process workflow dashboards, enabling real-time monitoring and actionable insights for AWS Commerce Platform.
- Developed a TypeScript package for automating wiki creation through CDK, slashing ticket volume by 40% via enriched and restructured service dashboards.
- Designed and integrated a new software component to generate and feed custom workflow metrics into AWS CloudWatch, doubling metric availability and halving ticket resolution time.

University of British Columbia ⌕ Vancouver, Canada
Lead Teaching Assistant *Dec 2020 - May 2023*
- Taught courses in Algorithms, Software Engineering, and Computer Systems utilizing Racket, Java, TypeScript, and C.
- Achieved a 100% favorable student rating by refining lab materials across 12+ sections.
- Spearheaded training initiatives for 80+ teaching assistants per term, elevating the department's instructional quality.

Shenzhen Youpin Cosmetics Tools Co., Ltd. ⌕ Shenzhen, China
Software Engineer (Contract Part-Time) *Jan 2022 - Jul 2022*
- Secured and executed a $12,000 contract to develop and deploy an inventory management app using Java and MySQL.
- Optimized inventory turnover rates by 25% across 7 product lines and 8 material categories.
- Centralized inventory management across 4 departments, enhancing accuracy by 10% and cutting labor hours by 50%.

RESEARCH EXPERIENCE & PROJECTS

- **Mindful Driving** ⌕ : Led an EEG-based research project at York University's Centre for Vision Research to analyze neural responses to various driving conditions using an electroencephalogram test. Utilized feature extraction and transformation on variables such as music volume and surrounding brightness and applied decision tree algorithms to predict drivers' cognitive states. Conducted the research in July 2023.
- **Job Central** ⌕ : Engineered a full-stack job query application using Spark, PostgreSQL, and React. Created RESTful APIs to execute CRUD operations via Oracle JDBC, and implemented advanced search filters to improve the job-matching process for users. Completed in April 2022.
- **University Blueprint** ⌕ : Adhered to Agile methodologies in an 8-week sprint to develop a full-stack web application for course planning and analytics. Achieved 100% test coverage across 250+ tests using Mocha and Chai. Features included EBNF syntax for trend analysis and Yarn for package management. Completed in January 2022.
- **Pomodoro Study** ⌕ : Built a desktop application to enhance study productivity, featuring a Java Swing-based GUI, AudioInputStream for music components, and persistent storage for checklist items. Completed in May 2021.

LEADERSHIP EXPERIENCE

Cars and Hoops Foundation ⌕ Vancouver, Canada
Vice President of Operations *Nov 2021 - Present*
- Amplified fundraising campaigns that raised over $200,000 for Canuck Place Children's Hospice, demonstrating exceptional team leadership, resilience, and financial acumen.
- Orchestrated strategic sponsorships, securing valuable partnerships with industry leaders including Lucid, Ledcor, ASPAC Developments, and National Bank of Canada.

Varsity Basketball Richmond, Canada
BC Regional MVP 2020, Richmond City League All-Star 2020 *Sep 2015 - Present*
- Excelled as team captain and led the team to its inaugural provincial championship in 18 years.

SKILLS SUMMARY

- **Languages**: Python, C++, Java, R, SQL, Typescript, Matlab, Scala
- **Technologies**: TensorFlow, PyTorch, Spark, Kubernetes, Docker, AWS, Azure, Git, Kafka, Redis, QuickFIX
- **Quantitative**: Statistical Modeling, Time-Series Analysis, Algorithmic Trading, Risk Management, Optimization
- **Soft Skills**: Teamwork, Communication, Problem-Solving, Analytical Thinking, Leadership