




Jonathan Hu




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

jh2829@cornell.edu
1 (607) 339-1279
linkedin.com/in/jjun-hu/ 





EDUCATION

- Cornell University**  **GPA: 4.0**
Master of Engineering - Computer Science 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
 - Ranked** 5th/908 students in faculty (top 0.5%), first student in program history to graduate in just 3 years
 - Courses:** Machine Learning, Artificial Intelligence, Project Management, Relational Databases, Networking, Algorithms and Data Structures, Concurrent Programming, Distributed Computing, Computer Systems
 - 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
 - Amplified the externalization of business process workflow dashboards and metrics for AWS Commerce Platform
 - Introduced Typescript package that automates wiki creation through CDK infrastructure, facilitating automatic pipeline deployment via approval workflows; reduced ticket volume by 40% by restructuring and enriching service dashboards
 - Architected and onboarded a new software component that generates custom workflow metrics to AWS CloudWatch, doubling the number of available metrics and cutting down workflow ticket resolution time by half
- University of British Columbia**  Vancouver, Canada
Lead Teaching Assistant Dec 2020 - May 2023
 - Taught introductory algorithms, software engineering, and computer systems courses in Racket, Java, Typescript, and C
 - Refined lab material and received 100% favorable student rating across 12+ sections
 - Cultivated department's instructional team, training 80+ new teaching assistants per term
- Shenzhen Youpin Cosmetics Tools Co., Ltd.**  Shenzhen, China
Software Engineer (Contract Part-Time) Jan 2022 - Jul 2022
 - Negotiated and executed on \$12,000 contract to build and deploy inventory app with Java and MySQL
 - Improved inventory turnover rate by 25% across 7 different product lines and 8 types of raw materials
 - Enhanced inventory accuracy rate by 10% (85% to 95%) and reduced labor hours by 50% (50 to 25 hours) by centralizing inventory management across 4 departments

RESEARCH EXPERIENCE & PROJECTS

- Mindful Driving** - unraveling neural responses to driving stimuli using electroencephalogram test, research project at York University, Centre for Vision Research  : Led EEG-based research measuring electrical activity in the brain to identify brainwave patterns in different driving conditions with stimuli like music volume and surrounding brightness. Extracted and transformed features and predicted drivers' cognitive states using decision tree machine learning model (July '23)
- Job Central** - job dashboard and query engine for recruiters and applicants  : Created REST endpoints with Spark framework that executed CRUD queries via Oracle JDBC; built full-stack query app using PostgreSQL, Java, and React. Integrated filtering by company, location, and salary for applicants to effortlessly find their desired positions (Apr '22)
- University Blueprint** - course logistics web app, supports course analysis and planning for staff  : Adopted test-driven agile development methodologies to build full-stack web app over 8 one-week sprints. Maintained datasets locally with Node.js fs; parsed data zip files with JSZip and HTML files with Parse5; developed EBNF syntax that facilitates trend analysis and course planning; managed packages with Yarn. Utilized Mocha and Chai frameworks for testing and achieved 100% test coverage for 250+ tests performed (Jan '22)
- Pomodoro Study** - personal checklist and web timer application  : Developed GUI application in Java with Swing, added music components using AudioInputStream; incorporated persistent data storage to store incomplete checklist items (May '21)

LEADERSHIP EXPERIENCE

- Cars and Hoops Foundation**  Vancouver, Canada
Vice President of Operations Nov 2021 - Present
 - Amplified fundraising efforts, raised over \$200,000 for Canuck Place Children's Hospice as part of a dedicated team
 - Facilitated strategic sponsorship outreach, forging successful partnerships with multinational companies including Lucid, Leducor, ASPAC Developments, National Bank of Canada, and others
- Varsity Basketball**  Richmond, Canada
BC Regional MVP 2020, Richmond City League All-Star 2020 Sep 2015 - Present

SKILLS SUMMARY

- Languages:** Python, Java, Javascript, HTML, CSS, Typescript, C, C++, SQL, R, Racket
- Technologies:** Node.js, React, Spark, Java Spring, Express, MySQL, PostgreSQL, AWS, React Native, Chai, Git
- Soft Skills:** Leadership, Design, Project Management, Writing, Business Presentation, Teamwork