IAN QUAN

Canadian Citizen · (437)351-3690 · Toronto, ON

quanian031229@gmail.com · linkedin.com/in/ian-quan-ca · github.com/IanQuan · ian-quan.com

EDUCATION

University of Toronto — **Sep. 2021 – May. 2026**

Honors Bachelor of Science, Double Major in Computer Science and Statistics — *CGPA: 3.6/4.0*

- **Relevant Coursework:** Data Structures, Algorithm Design, Database Management, Operating Systems, Systems Programming, Computer Networks, Software Design, Machine Learning, Deep Learning, Computer Vision

EXPERIENCE

Shopify — **Jan. 2025 – Apr. 2025**

Incoming Engineer Intern — *Toronto, ON*

- Scheduled to complete a 16-week internship with the Shopify Engineering Team in Winter 2025

S&P Global — **Sep. 2024 – Dec. 2024**

Software Engineer Intern | *Java, React.js, TypeScript, MySQL, Azure DevOps* — *Toronto, ON*

- Contributing to S&P Global Rating's Structured Finance Team to **develop a web application for automated credit rating letter generation**, replacing Excel marocs, which accelerated letter generation by **50%**
- Designed scalable **microservices** using **Kubernetes** and developed **SOAP/REST APIs** with **Spring Boot**
- Integrated automated **API testing** with **Postman** and **unit testing** with **JUnit**, increasing testing coverage by **70%**
- Leveraged **Agile** development using **Azure DevOps** and weekly sprints, streamlining workflows through **CI/CD** pipelines

University of Toronto, Department of Economics — **Apr. 2024 – Present**

Undergraduate Researcher - Supervisor: Loren Brandt — *Toronto, ON*

- **Built a topic modeling pipeline and conducted data preprocessing** on **1000+** China policy documents using **Python**
- Clustered key topics using **BERT topic model** and conducted topic matching using **natural language processing (NLP)** methods

Global Health Core Inc. — **Apr. 2024 – Aug. 2024**

Full-Stack Web Developer Intern | *React.js, TypeScript, Next.js, MongoDB, Material UI* — *Toronto, ON*

- Led a web development team in an early-stage start-up in the healthcare sector
- **Developed a patient dashboard that centralizes health data**. Reduced UI render time by **25%** for complex patient data interactions by implementing **Redux** for state management
- Optimized data retrieval by implementing a **NoSQL** database, improving system scalability to handle **3x** the users

0Barriers — **Jan. 2024 – Apr. 2024**

Software Developer | *React.js, JavaScript, Node.js, MongoDB, AWS* — *Toronto, ON*

- **Developed a configurable WCAG violation webpage scanning app** with **MERN** stack and deployed through **AWS S3**
- Incorporated visual data insights in the compliance reports, reducing compliance review time by **30%**
- Led the implementation of configurable parameters for webpage scans using **Puppteer**, enabling real-time simulation

PROJECTS

MeetHomie | *Django, React.js, JavaScript, REST API, Material UI, Tailwind CSS* — **Jan. 2024**

- **Developed a lightweight scheduling app to streamline coordination of one-on-one meetings**
- Designed and implemented a preference-based matching algorithm to optimize scheduling for mutual convenience

J2C Translator | *Python, NumPy, PyTorch, Pandas, NLP, Deep Learning* — **Nov. 2023**

- **Created the first Jyutping to Chinese Character translator** with a **94%** test accuracy using **Transformer Model**
- Performed **data cleaning** and **word embedding** on over **18,000** training examples from Cantonese dialogue datasets
- Designed a weighting mask to solve the homophone ambiguity problem in J2C translation, increasing **7%** in accuracy

Digital Transformation with Salesforce | *Salesforce Service Cloud* — **May - June 2024**

- Collaborated on a digital marketing project for a bank, focusing on digital transformation strategies using **Salesforce Service Cloud**
- Gained hands-on experience implementing Service Cloud features to enhance customer service processes and streamline workflows

SKILLS

Languages: Python, JavaScript/TypeScript, Java, C

Database: MongoDB, PostgreSQL, MySQL, SQLite

Frontend Development: React.js, HTML/CSS, Next.js, Bootstrap, Tailwind, Material UI, Redux

Developer Tools: AWS, Azure, CI/CD, Docker, Linux

Project Management: Jira, Agile, Git, Azure DevOps

Backend Development: Node.js, Django, Flask, Postman