Stephen Ristow

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Summary of Qualifications

Master's student in Computer Science with a background in academic research, transitioning into software engineering. Experience in web development, coding full-stack and mobile apps. Open to junior and internship full-stack developer roles.

Technical Skills

Programming Languages: Python, Java, SQL, JavaScript, Bash, LaTeX, MATLAB, Typescript

Web Development: Django, Flask, HTML/CSS

Database Management: SQL Databases (MySQL, Postgres)

Tools & Platforms: Git, Docker, Kubernetes (Kind), REDCap, IntelliJ IDEA, Power BI

Operating Systems: Linux, Mac OS X, Windows

Core Competencies: Full Stack Development, Data Structures, Schema Design, Query Optimization, Algorithms, Software Development Lifecycle (Agile), Object-Oriented Programming (OOP), Data Analytics

Education

Master of Science, Computer Science, Computing Systems Specialization
Georgia Institute of Technology   *Aug 2024 – Aug 2026*
Bachelor of Science, Honours Physics *University of British Columbia*   *Dec 2015 – May 2018*

Projects

'GotchaTama – Tamagotchi Tracker'
- Building a React Native app to help users track Tamagotchi collections with persistent local storage (AsyncStorage) and animated UI elements
- Developing a robust knowledge base of React front-end development through designing an intuitive and responsive layout and modal interactions with TypeScript
- Focused on shipping critical features to drive business growth and customer satisfaction

'PawsPort – Social Media Platform for Dogs'
- Developed a full-stack Django web app with MySQL, secure authentication, and raw SQL-based backend operations to manage pet profiles and social features
- Implemented CI/CD frameworks by containerizing the application using Docker and deploying locally via Kubernetes (Kind) to simulate scalable service architecture
- Employed Git version control and shell scripting to support automation pipelines
- Utilized debugging skills to identify and resolve complex software issues

'Human-Computer Interaction Coursework Project – Spotify Now Playing Screen Improvements'
- Conducted design lifecycles on the Spotify Now Playing screen to identify areas for improvement, demonstrating an ambitious approach to solving problems
- Implemented functional prototypes in Android Studio that showed an improvement in user audio seek time by 50%
- Produced textual and wireframe prototypes in Figma to convey creative design alternatives to users

'Database Systems Concepts & Designs Coursework Project – Full-Stack Vehicle Sales Website'
- Explored database design and development through building a responsive full stack website using Flask and embedded raw MySQL queries (bypassing the built-in ORM) to manage vehicle sales data efficiently
- Designed and implemented role-based user authentication, enabling differentiated access for staff (inventory clerks, salespersons, and owners) and public users, thereby streamlining operations and enhancing security
- Held leadership role within team project setting, ensuring actionable steps were taken to meet project deadlines and expectations were met or exceeded
- Designed and deployed a scalable and secure full-stack application, caring for the integrity of data and adhering to industry standards

'Retraining the PICS AI – Honors Thesis'
- Retrained a machine learning algorithm to correctly classify false positives, improving classification rate by 65%, up to 85% in testing sets.
- Developed confident communication skills through research and academic writing, resulting in effective presentation of complex ideas

Previous Experience

Research Project Assistant *Provincial Health Services Authority*   *Feb 2021 – Present*
- Collaborates with cross-disciplinary teams to implement data capture solutions, offering honest insights to drive project success
- Communicates effectively with participants by developing knowledge translation materials, resulting in a 30% increase in engagement
- Translates project stakeholder needs into functional business requirements and implements tools to streamline data workflows
- Leads investigations to elucidate workflow optimizations, improving data entry by up to 50%
- Applies empathy to understand diverse perspectives and develop inclusive research approaches

Research Assistant *University of British Columbia*   *Dec 2018 – Dec 2020*
- Utilized shell scripting to transfer data, run analysis pipelines, perform data entry, and clean datasets for two major projects involving 150 participants
- Increased participant retention by over 70% during a critical period by proactively following up and maintaining accurate contact records
- Supported multiple research projects and ensured timely data processing by appropriately prioritizing tasks