Barun Gambhir

EDUCATION

Simon Fraser University

Sep 2020 – Apr 2025 (expected)

Bachelor of Science in Computer Science, Minor in Mathematics

Burnaby, BC

- GPA: 3.72, President's and Dean's List, Undergraduate Open Scholarship Recipient
- Relevant Coursework: Data Structures and Programming, Operating Systems, Software Engineering, Software Testing, Reliability and Security, Full Stack Web Development, Database Systems

EXPERIENCE

Software QA Analyst (Co-op)

Jan 2023 – Aug 2023

Motorola Solutions Inc.

Vancouver, BC

- Developed and executed test plans to cover business requirements, reducing post-release defects by 20%.
- Actively participated in code reviews and created quality unit tests to maintain code integrity.
- Used Provar for test automation, significantly reducing manual testing efforts by 50%
- Improved defect resolution time by 25% by diligently tracking, documenting, and troubleshooting issues.
- Performed data validation and integrity checks by querying the Salesforce database using SQL.
- Proficiently utilized JIRA, Bitbucket, Confluence, and TestRail to streamline project management, version control, documentation, and test case management.

Technical Services Assistant (Co-op)

Jan 2022 - Aug 2022

Microserve

Vancouver, BC

- Provided end-user technical support at health authorities ensuring 100% customer satisfaction.
- Troubleshot and resolved issues, leading to an overall 25% reduction in possible network-related incident tickets.

Projects

Tales Web App | React, Node.js, MongoDB

Oct 2023 – Dec 2023

- Developed a full-stack app transforming over 1,000 textual stories into narrated image sequences providing an engaging user experience.
- Enabled user authentication to provide a secure and reliable platform
- Leveraged OpenAI API to simplify prompts and briefly summarize to reduce story narration time by 50%
- Deployed app on Google Cloud for seamless scalability, utilizing MongoDB with Mongoose to handle 100,000+ story segments efficiently.

$\mathbf{jpegTOpng} \mid C, C++, Google \ Test$

Oct 2023 – Nov 2023

- Developed a modern C++ application for JPEG to PNG conversion using libraries image handling.
- Created quality unit tests including images across diverse size and color spaces.
- Integrated AFL plusplus for fuzz testing, uncovering 15+ previously undetected vulnerabilities, strengthening application security and stability.

Personal Website | HTML, CSS, Javascript, Link

May 2023 - Jan 2024

- Successfully designed and developed a professional personal website using it to showcase my skills, projects, and professional journey.
- Regularly updating the website by ensuring timely addition of new projects, skills, and achievements to reflect
 professional growth

Recyclopedia Mobile App | Java, Android Studio

May 2022 – Aug 2022

- Developed Android app at Simon Fraser University, enabling users to post/discover 10K+ reusable items and optimized SQLite for efficiency.
- Managed repository, led sprints, resolved Git conflicts, and conducted code reviews for Recyclopedia Mobile App's success.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS

Frameworks: React, Angular, Node.js, Mongoose, Bootstrap, Android Studio

Developer Tools: Git, Docker, CMake, Google Cloud Platform, Vim, VS Code, IntelliJ

Testing Tools: JUnit, Jasmine, Google Test, Selenium, Stryker, AFLplusplus