

KARAN PATEL

(613) 981-5014 | inbox.kpatel@gmail.com | [Website](#) | [LinkedIn](#) | [Github](#) | US Citizen

EDUCATION

Bachelor of Computer Science, Carleton University | 3.9 GPA Sept 2021 - May 2025

- Pursuing a Specialization in Software Engineering and Minor in Business with **\$16000** scholarship.
- Related Coursework: Introduction to Python, Java Object-Oriented Programming, Abstract Data Types and Algorithms, Discrete Structures I/II, University Calculus, Linear Algebra, Foundations of Info Systems, etc.

EXPERIENCE

Incoming Software Engineering Intern, Capital One, *New York City, NY* Jun 2023 - Aug 2023

- Selected for a highly anticipated internship with Capital One's Payments Intelligence Team
- Completed a project to migrate the credit card transaction cache system from Redis to DynamoDB saving cost **100K a year** in AWS resource costs and redefining cache contents
- Gaining hands-on experience in designing and implementing new features using Java and Python, leveraging technologies like AWS and Kubernetes
- Collaborating in an Agile environment, attending daily stand-up meetings, sprint planning sessions, and participating in code reviews to ensure efficient and high-quality software delivery

Teaching Assistant, Carleton University, *Ottawa, ON* Jan 2023 - May 2023

- Provided academic support to professors and students, including grading, review sessions, and office hours
- Facilitated group work and collaborative learning in the classroom
- Demonstrated strong problem-solving, critical thinking, and communication skills, and a commitment to education and student success

Software Engineering Intern, Ideabytes Inc, *Ottawa, ON* Jan 2022 - Sept 2022

- Improved company testing software run-time from **2** minutes to **20** seconds by using in-depth time/space analysis.
- Generated **\$1000** in monthly profits by introducing newer insights and tools to existing clients.
- Implemented new features such as website component visualizations, spell check, and auto-generated PDF's.
- Upgraded the response time of the RESTful API from **2.6** seconds per request to **0.9** seconds per request.
- Built an authentication system to log in and sign up users using internal authentication servers.

PROJECTS

Pathfinding Visualizer | Javascript, HTML/CSS

- Created a application to help visualize path finding algorithms.
- Implemented Dijkstra's, A*, Breadth First Search, and Depth First Search Algorithms to be visualized.

Heart Rate Variability device | C++, QT Framework, SQL

- Designed computer software for a standalone device called HeartWave that measures, analyzes, and displays HRV patterns through the use of an advanced heart rate monitor.
- Provided real-time biofeedback to users on their coherence levels to help reduce stress and achieve an optimal psychophysiological state of well-being and health.
- Implemented the project using C++ and the Qt framework to create interactive UI and utilized SQL to save patterns and sessions for later analysis.

Password Manager Web Application | Java, Spring Boot, Postgres SQL, HTML/CSS, Thyme-leaf,

- Built a secure password manager application to help store daily passwords.
- Encrypted the application and user details with Spring Security, login authentication and email verification.
- Deployed Application in the Cloud and used Postgre SQL as primary database.

SKILLS

Languages	Python, Java, HTML, CSS, JavaScript, SQL, C
Tools/Frameworks	Git, Jenkins, Jira, Docker, Kubernetes, Spring Boot, dynamoDB, CI/CD environment
Soft Skills	Communication, Time management, Teamwork, Leadership, Adaptability