GURNEET KAUR

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Professional Summary

- Honours Applied Computer Science student (Minor: Mathematics) with hands-on experience translating requirements into working technical solutions through research deliverables, course support, and projects. Skilled in Python, Java, SQL, JavaScript, and Linux-based environments, with strong debugging, troubleshooting, and structured problem-solving habits aligned with SDLC-style development.
- Experienced working with real-time sensor systems using Raspberry Pi 5 and Python by building data-collection and processing scripts, validating outputs through controlled tests, and documenting technical procedures for reproducibility, strengthening analytical thinking and attention to accuracy.
- Over a year of experience supporting 200+ students as a Teaching Assistant in Data Structures & Algorithms debugging Java programs, explaining algorithm behavior, and improving code quality through modular design, complexity reasoning, and test-case development.
- Developed Built analytics and application projects (ETL + SLA metrics + dashboards) using SQL/PostgreSQL, Docker-based setup, and JavaScript UI components—experience relevant to application development, integration testing mindset, and improving efficiency via repeatable workflows.
- Recognized for academic excellence (Dean's Honour List; Academic Proficiency Scholarship) with strong communication, stakeholder-style presentation experience in academic settings, and the ability to manage multiple competing priorities across research, teaching, and service roles.

Relevant Work Experience

Undergraduate Research Assistant — **September** 2025- Present
The University of Winnipeg — Winnipeg, Manitoba

- Developed Python scripts to collect, clean, and analyze real-time sensor data using Raspberry Pi 5, improving data signal reliability for experimental and analytical use.
- Broke down complex technical tasks into smaller testable components, designed controlled tests, and evaluated multiple implementations approaches to strengthen accuracy and reproducibility.
- Used MS Teams for team coordination; prepared Excel/PowerPoint summaries and presented research progress to university's department stakeholders**.**
- Contributed to a faculty-supervised research paper by supporting data handling, writing analytical sections, and applying critical-thinking skills—while adhering to confidentiality restrictions and not disclosing project-specific details.

Teaching Assistant (Data Structures & Algorithms) — September 2024- Present
The University of Winnipeg — Winnipeg, Manitoba

- Assist 200+ students by guiding them through debugging Java programs, identifying logic errors, and understanding algorithmic behavior through step-by-step reasoning.
- Teach modular program design, naming conventions, algorithm complexity analysis, and writing strong test cases to prevent common logic failures.
- Support grading, provide written feedback, invigilate exams, and respond to technical questions throughout the term, ensuring student comprehension and academic integrity.

Additional Work Experience

Customer Service Agent — October 2024 – Present
Perimeter Aviation — Winnipeg, Manitoba

- Provide customer support in a high-volume environment, managing inquiries, travel assistance, and service issues with professionalism and clarity.
- Demonstrate strong communication, patience, conflict-resolution, and problem-solving skills while assisting diverse passenger groups.

- Maintain accuracy in documentation, follow safety procedures, and collaborate with team members to ensure smooth day-to-day operations.

Projects

Flight-Status Dashboard (Northern Manitoba Community Tracker)

- Built an interactive JavaScript dashboard display live flight information for northern communities, focusing on usability under low-bandwidth conditions.
- Designed clean UI components emphasizing clarity, accessibility, and structured layout.
- Created reusable code modules to improve maintainability, scalability, and readability of the frontend system.

Northwind Pricing & Fulfillment SLA (ETL & Analytics System)

- Designed a compact analytics project implementing SLA metrics (lead time, on-time rate, late-day buckets, No-SLA flags) using a Northwind-style dataset.
- Built star-schema tables and SLA analytic views, enabling clean exports for Power BI, Excel, and CSV-based workflows.
- Wrote ETL SQL, schema creation scripts, and validation queries for automatic Docker-based Postgres setup.

Education

The University of Winnipeg
Bachelor Honours in Applied Computer Science Sep 2022 – Present
Minor: Mathematics

- Recognized for academic excellence through Deans Honour's list, maintaining a stellar 4.0 CGPA, demonstrating dedication to mastering applied computer science concepts.
- Awarded the Academic Proficiency Scholarship by The University of Winnipeg.

Relevant Courses: Data Structures & Algorithms, Computer Security & Privacy, Operating Systems, Artificial Intelligence, Data Warehousing

Volunteer

Executive Secretary (ACM Student Chapter) September 2025– Present
The University of Winnipeg Winnipeg, Manitoba

Community Volunteer (Langar Service) January 2023 – Present
Gurudwara Sahib Winnipeg, Manitoba Winnipeg, Manitoba

Certificates

Google Cybersecurity Certificate July 2025
AWS Cloud Technical Essentials November 2025