GURNEET KAUR
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Professional Summary

- Software developer with strong problem-solving and analytical skills demonstrated through academic excellence (4.0 CGPA, Dean's Honour List) and practical software development experience across Python, Java, SQL, JavaScript, and cloud technologies. Willingness to learn new technologies and adapt to change, with proven ability to work independently and collaboratively within teams.

- Experience with cloud and container technologies through AWS Cloud Technical Essentials certification and hands-on Docker-based project implementations. Exposure to automated deployment processes, data analysis, and reporting through ETL pipeline development and Power BI dashboard creation. Completed Google Cybersecurity Certificate, gaining understanding of secure software development practices.

- Academic and project exposure to deep learning concepts, Python scientific computing (NumPy/SciPy), and core mathematics (calculus, linear algebra, statistics, probability). Developed automated data processing systems using Python for real-time sensor analysis, demonstrating technical computing skills and software development best practices.

- Clear written and verbal communication skills developed through Teaching Assistant role supporting 200+ students, creating technical documentation, and contributing to research paper writing. Good organizational skills with ability to manage multiple assigned tasks efficiently while maintaining accuracy and meeting deadlines.

- Developed full-stack applications and data pipelines: JavaScript dashboard for flight-status tracking with REST API integration, Docker-based PostgreSQL ETL system with automated testing and validation, and Python automation scripts for data collection and analysis. Strong foundation in software design, testing, debugging, and version control with Git.

Relevant Work Experience

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

- Faculty research project required reliable real-time data collection and processing system for experimental analysis with minimal manual intervention. Developed Python scripts to collect, clean, and analyze real-time sensor data using Raspberry Pi 5, implementing automated data processing pipelines and validation checks. Improved data signal reliability for experimental analysis, reduced manual data processing time, and enabled consistent data collection for ongoing research.

- Complex technical implementation with multiple unknowns required systematic approach to ensure accuracy and reproducibility. Applied strong problem-solving skills to break down complex technical tasks into smaller testable components, designed controlled tests, and evaluated multiple implementation approaches. Strengthened accuracy and reproducibility of experimental system while building strong troubleshooting methodology that could be applied to future challenges.

- Research team needed clear documentation for continuity as project progressed. Documented workflows, procedures, and test results with detailed explanations and rationale. Supported research continuity and team collaboration, enabling smooth knowledge transfer.

- Faculty-supervised research paper required data analysis contributions while maintaining confidentiality. Contributed to research paper by supporting data handling, writing analytical sections, and applying critical-thinking skills while adhering to confidentiality restrictions. Successfully contributed to academic research output while developing technical writing skills.

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

- 200+ students needed guidance debugging Java programs and understanding complex algorithmic concepts. Assisted students by guiding them through debugging Java programs, identifying logic errors, and understanding algorithmic behavior through step-by-step reasoning and systematic troubleshooting approaches. Developed strong communication and teaching abilities while helping students achieve better understanding of core software development concepts.

- Students needed to learn software development best practices beyond just writing code. Taught modular program design, naming conventions, algorithm complexity analysis, and writing strong test cases to prevent common logic failures. Equipped students with core software development best practices applicable to professional development environments.
- Multiple assigned tasks required organization and time management throughout the term. Supported grading, provided written feedback, invigilated exams, and responded to technical questions throughout the term. Successfully managed multiple assigned tasks while ensuring student comprehension and academic integrity, demonstrating organizational skills and reliability.

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)

- Northern communities needed accessible flight information display system that worked reliably under low-bandwidth conditions.
- Built interactive JavaScript dashboard to display live flight information with clean UI components emphasizing clarity, accessibility, and structured layout. Integrated REST APIs for data retrieval and created reusable code modules.
- Delivered maintainable, scalable frontend system demonstrating HTML/CSS skills, REST API integration, and software development best practices including version control with Git.

Northwind Pricing & Fulfillment SLA (ETL & Analytics System)

- Needed to build analytics system demonstrating end-to-end data pipeline with automated deployment and business intelligence integration.
- Designed and implemented analytics project with SLA metrics (lead time, on-time rate, late-day buckets, No-SLA flags) using Northwind-style dataset. Built star-schema tables and SLA analytic views enabling clean exports for Power BI, Excel, and CSV-based workflows.
- Created fully automated Docker-based PostgreSQL deployment with ETL SQL, schema creation scripts, and validation queries, demonstrating exposure to container technologies, automated testing/deployment processes, data analysis, and Power BI dashboards.

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, Calculus, Linear Algebra, Statistics

Volunteer

Treasurer (ACM Student Chapter)   January 2026– Present
The University of Winnipeg   Winnipeg, Manitoba

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

Certificates

Google Cybersecurity Certificate   July 2025
AWS Cloud Technical Essentials   November 2025