

# Kartik Patel

Brampton, Ontario, Canada • +358 40 3230116 • kartikpat25@gmail.com

• <https://www.linkedin.com/in/kartik-patel-a042872b6/> • <https://github.com/KartikPat250905>

## ABOUT

A motivated first-year student with a passion for learning and personal growth. Eager to develop skills and contribute meaningfully to academic and professional opportunities in the field of Computer Engineering. Dedicated to working hard and achieving goals.

## TECHNICAL SKILLS

- **Programming :** Python, C++, C, C#, MariaDB, MicroPython, Rust.
- **Frontend Technologies :** React, JavaScript, TypeScript, HTML, CSS.
- **Other Technologies :** Git, CI/CD, Linux, Bash, Firebase, Excalidraw, Unity.

## EDUCATION

### B.Sc. in Computer Science

Toronto Metropoltian University, Toronto, Canada

Jan 2026 - Present

### Bachelor of Engineering in ICT, Average GPA (5/5)

Metropolia University of Applied Sciences, Helsinki, Finland

Aug 2024 - May 2025

### Extensive coding in C

Hive, Helsinki, Finland

Feb 2024 - July 2025

## WORK EXPERIENCE

### Junior AI Developer

Cydora, Helsinki, Finland

June 2025 - Present

Technologies used: **Python, SQL, REST APIs, , CI/CD, Git, Machine Learning frameworks.**

- Built and maintained AI-driven backend systems that automated business workflows and supported scalable client solutions.
- Developed machine-learning pipeline components and integrated backend logic for production environments in collaboration with the founder.
- Improved system reliability and delivery quality through clean architecture, testing, and modern development practices.

### AI Intern

May 2025 - June 2025

Cydora, Helsinki, Finland

Technologies used: **Python, React.js, Web Development tools, AI Agents, AI/ML libraries.**

- Supported the integration of AI features into client applications and contributed to full-stack development in a fast-paced startup environment.
- Researched and prototyped AI tools, software agents, and engineering techniques to enhance efficiency and performance.
- Assisted in building and testing components across both backend and frontend workflows.

## PROJECTS

### Heartbeat Sensor | MicroPython| Group Project | <https://github.com/ktnlvr/cardiotron>

- Developed a heartbeat monitoring system using ADC signals on Raspberry Pi Pico for real-time heartbeat detection and analysis.
- Implemented signal filtering and exported processed data to Kubios for advanced heart rate variability (HRV) analysis.

### Drakula V2 | Python, JavaScript, HTML, CSS | Group Project | <https://github.com/ktnlvr/drakula-v2>

- Developed a 3D horror game using JavaScript, HTML, CSS, and Python.
- Leveraged Three.js to create realistic 3D models and immersive environments.
- Integrated the game with an SQL Server backend using python Fast API to dynamically fetch real-world airport data.

### Minishell | Hive | C, Bash | Duo Project | <https://github.com/Deblish/minishell>

- Creating a mini shell, a simplified replica of the original bash shell with reduced functionality.
- Learning to parse input and tokenize commands.
- Implemented signal handling with memory management.

## HACKATHON

---

### **Supercell AI Hackathon | Unity, C# | 3<sup>rd</sup> place | AI/Game Development hackathon**

- Won 3<sup>rd</sup> place at the Supercell AI Hackathon for creating a prototype where cat-controlled player interacts with context-aware, AI driven character
- Recognized among 50+ global teams for designing a standout real time AI interaction system that blends gameplay narrative, and LLM based character behavior.

### **Student Network Challenge Hackathon | 3<sup>rd</sup> place | Idea hackathon**

- Hackathon organized by Microsoft, Nokia and Elisa and hosted by University of Helsinki.
- Conceptualized an AI-driven solution for sustainability, securing 3<sup>rd</sup> place among multiple teams.

### **Junction Hackathon | Python (ML) | <https://github.com/ktlnlvr/junction-2024>**

- Developed a model that predicts input amounts based on water loss at each production stage to minimize end-product standard deviation.
- Achieved 97% accuracy with the provided dataset.

## LEETCODE

---

### **LeetCode | Data Structures and Algorithms | C++ | <https://leetcode.com/u/KartikPat25094/>**

- Solved over 230 problems on LeetCode.
- Experienced in advanced algorithms: Backtracking and Divide and Conquer.
- Strong knowledge of Trees, Binary Trees, DFS, and other data structures : Arrays, Linked Lists, Stacks, Tries.

## ACHIEVEMENTS

---

- SAT 1440/1600 (95 percentile) Maths : 740 and English : 700.
- **Proficient in Abacus and Mental Arithmetic Skills**
  - National level : 3<sup>rd</sup> runner-up and State level : 1<sup>st</sup> runner-up.
- Achieved Grand Master (GM) title.