

DEV AGARWAL

☎ 4379849926 ✉ dev.agarwal@mail.utoronto.ca  [Linkedin](#)

Education

University of Toronto

Expected April 2026

Computer Engineering Major with Business and AI Minor (GPA: 3.36 / 4.00)

Toronto, Ontario

- **Relevant Coursework:** : Linear Algebra (**MATLAB**), Computer Programming Fundamentals (**C & C++**), Design Course, Calculus, Digital Systems (**Verilog**), **Circuit Analysis**

Technical Skills

Languages: C, C++, Verilog, Java, Python, MATLAB, SQL, HTML, CSS

Technologies: Linux Scripting, Git Version Control System, Unity, MS Office

Experience

Tutor Doctor

October 2023 – Present

Private Tutor

Toronto, Ontario

- Developed customized lesson plans demonstrating strong communication and interpersonal skills, ensuring effective knowledge transfer.
- Helped students improve their understanding of complex mathematical topics, leading to noticeable academic improvements.

Star Paper Mills

June 2023 – July 2023

IT Assistant Intern

India

- Assisted the IT department by writing **SQL** queries and troubleshooting IT-related issues for over 50 employees.
- Gained experience with Oracle databases, **SQL** programming, Industry IT basics, and **Customer Services**.
- Reduced IT related tickets submissions by over 20%.

Technical Extra-Curricular Clubs

University of Toronto Aerospace Team

September 2022 – Present

Member

- Designed an autonomous drone for an AEAC competition using complex data structure algorithms.
- Worked on transport route optimization, focusing on finding the shortest path between 26 waypoints with each path between the waypoints containing various payloads (profit) which needed to be transported.
- Tailored graph theory algorithms like Dijkstra and Simulated Annealing in **Python** to meet our requirements, producing the shortest path between the two waypoints which maximized profit.
- The autonomous aircraft demonstrated a high level of proficiency allowing it to move through the correct waypoints with precision.

University of Toronto Formula Racing Team

January 2023 – April 2023

Member

- Worked on an autonomous Formula 1 racing vehicle for the **SAE** International competition.
- Manipulated the navigation of the vehicle around the racetrack using sensor signals, applying machine learning and data structure concepts in **C++** in a team of four.
- Achieved effortless turning of the vehicle with minimum collisions with cones that surrounded the track.

Projects

Reversi Game AI | C, Linear Algebra, Data Structures and Algorithms

- Produced an AI Algorithm in **C** in under 24 hours to play Reversi as part of my Computer Fundamentals Course
- Used Linear Algebra concepts treating the board as an 8X8 matrix using the four corners as different coordinate systems.
- Among 434 other students, secured 18Th position on the leader board receiving bonus marks for a flawless working algorithm.

Team Leader, Engineering Strategies and Practices

- Worked with a client, Creating Together Early On, who was experiencing issues with the layout of their kitchen affecting the workflow of the administrative staff, while leading a team of 6 enthusiastic engineers.
- Managed team meetings, distributed weekly tasks and tracked deadlines while optimizing the engineering design process for efficiency and productivity.
- Maintained client satisfaction at every project stage through effective team management, exceeding their expectation with our three final proposed designs.