# Gabriel Gottlob

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## Education

**University of Michigan, College of Engineering**                                                    **Ann Arbor, MI**
*B.S.E., Computer Engineering, International Minor, Minor in Statistics*          Expected Graduation: May 2026
- GPA: 3.95/4.0
- Course Highlights: Data Structures and Algorithms, Intro to Computer Organization, Applied Parallel Programming with GPU's, Intro to Embedded System Design, Discrete Mathematics, Making Financial Decisions
- Member of Eta Kappa Nu (HKN) Honor Society for Electrical Engineering and Computer Science
- Awards/Honors: Engineering Honors Program (EGL), William J. Branstrom Freshman Prize, James B. Angell Scholar, University Honors and Dean's List (Fall 2022, Winter 2023, Fall 2023, Winter 2024)

## Relevant Experience

**Engineering Global Leadership**                                                                      **Ann Arbor, MI**
*Engineering Honors Specialization*                                                                April 2024 - Present
- Studies as a member of a competitive BSE/MSE dual-degree program, integrating engineering and business management skills through coursework at the Ross School of Business to gain multidisciplinary expertise.
- Cultivates leadership capabilities through international experience, leadership workshops, and a master's-level capstone project aimed at addressing complex engineering and business challenges for a real-world company.

**Prestige Solutions**                                                                                 **Denver, CO**
*Manager*                                                                                          May 2024 - Aug. 2024
- Managed operations at a local window washing company, including responsibilities such as door-to-door sales, window washing, and training and managing a team of washers; facilitated over $15,000 in sales and services.

**MHackers Student Organization**                                                                      **Ann Arbor, MI**
*Member of Embedded Systems Team*                                                                  Sept. 2023 - May 2024
- Attended weekly meetings to learn Arduino, Raspberry Pi, and broader computer engineering fundamentals and apply them to team projects to develop teamwork and collaboration skills in an engineering context.
- Utilized Arduino (and its variant of C++) to design and build a working prototype of an eco-conscious air conditioning system that regulated temperature based on external environment conditions.

**High Point Creamery**                                                                                **Denver, CO**
*Shift Lead*                                                                                       May 2022 - Aug. 2023
- Oversaw daily operations and demonstrated strong leadership and interpersonal skills, showcasing consistent reliability and positive relationship building with coworkers, resulting in promotion to shift lead in one summer.

## Related Projects

**Connect 4 Artificial Intelligence**                                                                  Summer 2024
- Independently studied two-player game theory, including the minimax algorithm and alpha-beta pruning to develop an intelligent Connect 4 opponent in C++
- The AI considers both its own and the opponents potential moves up to 8 moves ahead, evaluating the strength of each board state using a self-provided heuristic function, and is incredibly difficult to beat using human skill

**Simplified SQL Clone**                                                                                Spring 2024
- Designed and implemented a simplified version of the SQL database query language in C++, which allows users to efficiently insert, conditionally print and delete, and join multiple data tables at once via text commands.
- Utilized various functions and data structures from the C++ STL and contains a robust testing suite, ensuring code efficiency, quality, and proper edge case handling

## Skills/Languages

- C++ (OOP), C (embedded/real time programming), Python (pandas), CUDA C (multi-threaded/parallel programming)