Gilberto Tumangday

416-371-6182 | gilberto.tumangday@mail.utoronto.ca | linkedin.com/in/gilbertotumangday | github.com/gilbertotumangday1

EDUCATION

Bachelor of Applied Science & Engineering - Computer Engineering + PEY Co-op **Sep. 2023 - Apr. 2028(expected)**
University of Toronto, St George Campus, Toronto, Ontario

SKILLS & RELEVANT COURSES

- ❖ Programming: C++, C, Java, Python, Javascript, HTML, CSS Verilog, Assembly, Git
- ❖ CAD: LTSpice, SolidWorks, Quartus, MATLAB, Altium
- ❖ Hardware Design: Arduinos, Circuit design, FPGA programming, Digital logic, Microcontrollers
- ❖ Time & Project Management: Task management/assignment, Organization, Scope management, Scheduling, Microsoft Project (Gantt charts), Excel, LucidChart (flow charts), Status reports

- ❖ ECE297 Software Design and Communication (C++ Design Course)
- ❖ APS105 Computer Fundamental (C)
- ❖ ECE243 Computer Organization (Assembly)
- ❖ ECE241 Digital Systems (Verilog, Quartus, FPGA)
- ❖ ECE231 Introductory Electronics (LTSpice)
- ❖ ECE216 Signals and Systems (MATLAB)
- ❖ APS112 Engineering Strategies and Practices II (Microsoft Project, LucidChart, Excel)

EXPERIENCE & PROJECTS

SUMO & COMBAT ROBOTICS TEAM MEMBER **Oct. 2023 - Jan. 2025**
University of Toronto • Toronto, Ontario
- ❖ Worked in a team of 3 other engineers to build an autonomous robot to participate in "SUMO wrestling" competitions
- ❖ Used SolidWorks to design & 3D print frame parts, used Arduino boards to control robots with embedded systems using motors & sensors.
- ❖ Currently creating new controlled combat robot using C++, Arduinos with motors, sensors, LEDs, & hardware troubleshooting

PAC MAN VERILOG PROJECT **Nov. 2024 - Dec. 2024**
University of Toronto, Toronto, Ontario
- ❖ Designed a simplified Pac-Man game using an FPGA board, keyboard, monitor, & VGA adapter.
- ❖ Programmed game logic in Verilog, utilizing finite state machines, always blocks, multiplexers, loops, counters & registers to display graphics on monitor through VGA adapter & score on FPGA board using LEDs.
- ❖ Tested the logic on FPGA boards & ModelSim for verification. Used Quartus Prime for pin assignments & code compilation.

SMART GLASSWARE STORAGE SYSTEM **Jan. 2024 - May 2024**
University of Toronto, Toronto, Ontario
- ❖ Managed a group of 6 students to design & pitch a glassware storage system using SolidWorks to develop & print functioning prototype
- ❖ Organized weekly group meetings & biweekly client meetings, using Microsoft Project & LucidChart to maintain Gantt & flow charts/schedules

HART HOUSE REDESIGN COMMISSION PROPOSAL **Sep. 2023 - Dec. 2023**
University of Toronto, Toronto, Ontario
- ❖ Led a team of 5 students in proposing a design project for the revamp of the U of T Hart house alleyway, researching functions, objectives & stakeholders to analyse & produce multiple deliverables, resulting in a final 85 page Conceptual Design Specification
- ❖ Organized meetings, made critical design decisions & guided fellow engineers in their creative process

2D ADVENTURE GAME **Sep. 2023 - Dec. 2023**
St Michael's College School, Toronto, Ontario
- ❖ Used Java libraries like AWT, Swing & JFrame to create customized graphics & design & implement different maps/levels from scratch; resulting in our executable 5-level single player computer game winning the competition

EXTRA/CO CURRICULARS

Director **Oct. 2023 - May 2024**
First Year Board of Directors, UofT Engineering Society (EngSoc), Toronto, Ontario
- ❖ Helped plan & execute events for first year engineering undergrads at UofT. Utilized research to identify potential venues, created & collaborated with other directors to plan themes, resulting in an end of year socialization & networking event for over 200 first students

President **Sep. 2022 - Jun. 2023**
Computer Science Club, St Michael's College School, Toronto, Ontario
- ❖ Orchestrated the education of over 60 students in learning Python & Java
- ❖ Organized weekly club meetings tutoring students in preparation for Waterloo "Canadian Computing Competition"

Co-Founder **Jan. 2021 - Jun. 2023**
Toastmasters Club, St Michael's College School
- ❖ Established public speaking club to enhance confidence & clarity in students, organizing weekly meetings, agendas & events (eg. government debates) resulting in over 40 members