Qingbo (James) Tong

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EDUCATION

University of Waterloo **Waterloo, Canada**

Bachelor of Applied Science, Major in Biomedical Engineering Class of 2030

- **Technical Skills:** SolidWorks, C++, Matlab, Java, HTML, CSS, JS, React, 3Js,

EXPERIENCE

UW Biomechatronics Team **Waterloo, Canada**

Core Team Member *September 2025 - Present*

- Developed a mechanically controlled lower body exoskeleton utilizing biosensors to interpret muscle signals, supporting lower body movement
- Applied proficiency in electric component integration and programming using ESP32 and CAN protocol to ensure seamless hardware-software functionality
- Designed, 3D-printed, assembled and tested a fully functional lower body Exoskeleton

Simpli Bambu (Junior Achievement Student Company) **Calgary, Canada**

Vice President of Environmental Impacts *October 2023 - March 2024*

- Created graphs representing researched carbon emission reductions in order to promote products and uphold shareholder standards regarding social-corporate responsibility.
- Reduced the company's total carbon footprint by approximately, 9000kg of C02 equivalent.
- Partnered with environmentally focused non-profits and charities.

Comfy Crafts (Junior Achievement Student Company) **Calgary, Canada**

IT and Website Designer *October 2022 - March 2023*

- Increased sales by developing the company website using Wix.
- Managed and organized company accounts: Gmail, Instagram, PayPal, Slack, Square.
- Moderated online company communications on Discord and Slack for 20 team members
- Created online surveys to collect consumer feedback and improve products.

Youreka Research Program **Calgary, Canada**

Student Researcher *October 2022 - March 2023*

- Research about the effects of radon gas on the progression of lung cancer
- Utilized biotech software (RStudio and Galaxy) to analyze collected data.
- Created a three-minute-thesis, poster, and PowerPoint to present our research
- Presented research at the regional symposium and won a gold medal.

PROJECTS

3D - Printed Flappy Goose Puzzle

- Utilized SOLIDWORKS to design a goose puzzle/toy
- Made up of over 10 different pieces and incorporates a wing-flapping mechanism
- Utilized Z-Suite to slice and 3D print our finished project.

Assistive Stand for Rubik's Cubes

- Designed a stand for Rubik's Cubes to help amputated users manipulate the cube
- Utilized biomedical design principles to empathize, define, and test our design iteratively
- Utilized 3D-printed plastic components and basic electronics to build a functional prototype