Thomas Bianco

MECHATRONICS ENGINEERING STUDENT QUEEN'S UNIVERSITY

+1 (437) 236-7245 · thomasbianco14@gmail.com · https://biancoindustries.ca
32 George Pipher Lane, Stouffville, ON Canada

TECHNOLOGY, DESIGN AND ENGINEERING

Passionate and driven Mechatronics and Robotics Engineering student at Queen's University, seeking opportunities to apply technical expertise in innovative and dynamic environments. Offering a strong foundation in robotics, AI, AR/VR, 3D printing, and emerging technologies, with a lifelong passion for engineering and problem-solving. Known for a hands-on approach to learning, a creative mindset, and the ability to collaborate effectively in multidisciplinary teams to develop impactful, future-ready solutions.

KEY COMPETENCIES

Strong technical knowledge base	Programming and CAD Design	Hands on approach
Data-driven decision making	Critical thinking	Proactive and self-motivated
Problem solving	Excellent communication skills	Adaptable and quick learner

RELEVANT ENGINEERING EXPERIENCE

Mosaic Manufacturing **May 2025 - August 2025**
Software Quality Assurance Engineering Co-Op
Developed and integrated a Python-based testing library for Mosaic's industrial 3D printers, streamlining automated QA processes and enhancing overall machine reliability. Led bug troubleshooting and implemented code fixes into the main repository, ensuring consistent system performance. Played a key role in executing monthly Release Candidate testing, rigorously validating all machine functions to maintain high-quality software releases.

ADDITIONAL WORK EXPERIENCE

Mosaic Manufacturing | Pilot Unit Assembler/Intern — June 2023 - July 2023
Virtual Sting - Upper Canada Mall | Helper/Tech Associate — August 2022 - June 2023

EDUCATION AND AWARDS

Mechatronics and Robotics Engineering Queen's University, 2nd Year Student
Graduation in 2028

Dean's Scholar Distinction Award
On behalf of Queen's Smith Engineering for outstanding academic performance

EXTRACURRICULAR ACTIVITIES

Relectric Design Team 2024 & 2025 School Years

Relectric is a Queen's funded design team which has engaged in projects such as electrifying a '97 Jeep TJ and building a electric go-kart for the Purdue evGP.

PERSONAL PROJECTS - BIANCOINDUSTRIES.CA

Advanced 3D printer Filament Storage Solution	January 2025
AI Fake News Detector	June 2024
AI Stock Bot	May 2023
Building a Voron 3D Printer	March 2023
Custom Build Racing Drone	May 2021
Autonomous Drone	August 2020