GEOFFREY BIAN

Computer Engineering Student | geoffreybian100@gmail.com | 604-352-3756 | [LinkedIn](#)

TECHNICAL SKILLS

Software:	Java, C/C++, Python, HTML, JavaScript, GitHub, Git, MATLAB
Hardware:	Altium, PCB Design, Raspberry PI, ARM Assembly, System Verilog
Other:	Microsoft Office Suite, Adobe Creative Suite, SOLIDWORKS, Metalworking

TECHNICAL EXPERIENCE

Electrical Designer | UBC Formula Electric   *September 2022- Present*
- Collaborated in the development and construction of the electric vehicle, Thruna, placing 2nd in battery efficiency and 21st overall out of 69 teams in the 2023 Formula SAE Electric competition.
- Designed and validated the Tractive System Active Light PCB board with Altium ensuring compliance with competition standards, enhancing functionality, and prioritizing driver safety.
- Implemented, organized, and improved the vehicles wiring and board connections through Altium, and within the physical vehicle to effectively enhance firmware-hardware synergy.

Mechanical Engineering Intern | Acuren   *May 2023 - August 2023*
- Performed mechanical tests including tensile and impact tests, utilizing industry-standard equipment and procedures within Acuren's accredited engineering and metallurgical laboratory to validate material quality.
- Collaborated with interdisciplinary teams to effectively oversee and implement multiple projects simultaneously, while ensuring strict adherence to project timelines and financial constraints.
- Generated comprehensive technical reports summarizing test results, observations, and recommendations, bolstering the organization's knowledge base, and providing critical documentation.

OTHER EXPERIENCE

Content Creator | West Richmond Community Center   *June 2021 - August 2022*
- Utilized photography and graphic design tools to revamp the community image of West Richmond's basketball camp, resulting in a more compelling and effective brand representation.
- Leveraged various social and networking platforms to promote the camp and establish connections with patrons, expanding outreach and engagement (22% growth over summer 2021).

Ice Hockey Referee | BC Hockey   *September 2016 – Present*
- Managed on-ice conflicts, while ensuring impartiality to maintain the integrity of the game and uphold sportsmanship standards.

TECHNICAL PROJECTS

Internet of Things Server   *November 2023 – December 2023*
- Developed a robust IoT server to provide clients with seamless access to toggle services and prediction functionalities for actuators and sensors.
- Identified and resolved complex issues within the IoT server to ensure system's stability and reliability.

Audio Manipulation System   *September 2023 – October 2023*
- Implemented Fourier Transform algorithms to analyze audio signals, enabling the conversion of audio data from the time domain to the frequency domain for advanced analysis.
- Developed and optimized audio filtration algorithms, including noise reduction, pitch shifting, and equalization, enhancing audio quality.

EDUCATION

University of British Columbia   *Expected Graduation: May 2027*
- Bachelor of Applied Science in Computer Engineering
- Cumulative GPA: 88.3% (4.2)

Relevant courses: Software Construction I, Computing Systems I