

Michael J. Bell

Electrical Engineering Graduate

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Web Portfolio <https://mikebell.cc/>

About

Electrical Engineering graduate with distinction seeking an Engineer-in-Training position in electrical design or consulting engineering. Experience in electrical design, technical documentation, CAD, testing, and system integration across aerospace, research, and manufacturing environments. Skilled in developing engineering deliverables, reviewing technical drawings, and supporting multidisciplinary design projects with a practical, detail-oriented approach.

Co-op Experience

General Dynamics Mission Systems – Canada, Calgary AB	Jan 2024 - Sep 2024
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Research & Development Hardware Team Engineering Co-op (8 mo.)

- Designed and reviewed electrical circuits, power systems, and analog hardware for embedded electronic products.
- Produced and maintained engineering schematics using Siemens Mentor Xpedition.
- Selected electronic components based on performance, reliability, environmental requirements, and cost.
- Performed design analysis and verification to improve power distribution and overall system performance.
- Collaborated with multidisciplinary engineering teams throughout the design and development process.
- Worked within a highly regulated engineering environment requiring strict documentation and configuration control.

SKYTRAC, Kelowna BC	May 2023 - Dec 2023
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Design Airworthiness Organization Engineering Co-op (8 mo.)

- Reviewed aircraft electrical wiring diagrams and installation drawings to support avionics modifications and certification.
- Prepared engineering documentation including STCs, Engineering Service Bulletins, Certification Plans, Electrical Load Analyses, and DO-160G qualification reports.
- Collaborated with engineering, production, and certification teams within a highly regulated aerospace design environment using ASD-STE100 technical writing standards.

Technical Work Experience

UBC Okanagan Omega Labs, Kelowna BC	May 2025 - April 2026
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Undergraduate Research Assistant

- Designed, assembled, and tested experimental electrical and mechanical systems.
- Fabricated prototype components using 3D printing and sourced materials from commercial suppliers.
- Collected, processed, and analyzed experimental data using MATLAB and Python.
- Operated laboratory instrumentation including vector network analyzers, profilometers, and electrical measurement equipment.
- Developed embedded systems and web-based interfaces for automated test fixtures.
- Documented testing procedures and experimental results to support ongoing engineering research.

Lanmark Engineering, Calgary AB	Jun 2022 - Sep 2022
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Electrical and Instrumentation Control Internship

- Verified cathodic protection systems on pipeline segments and meter stations.
- Reviewed electrical and instrumentation drawings and prepared redline markups using Bluebeam Revu.
- Developed construction scopes of work to support engineering projects.
- Supported field engineering activities and documentation for industrial infrastructure projects.

Technical Projects

Please see my web portfolio to view my projects - <https://mikebell.cc/projects/>

Education

Bachelor of Applied Science, Electrical Engineering

2020 - 2026

University of British Columbia Okanagan, *Kelowna BC*

- 2x Deputy Vice-Chancellor Scholarship for Continuing Students UBC (2020, 2021)
- Graduated with Distinction | **GPA 3.38 / 4.00**

Technical Skills

Software

- AutoCAD
- SolidWorks
- Bluebeam Revu, Adobe Acrobat
- Altium Designer, KiCad, Siemens Xpedition
- MATLAB & Simulink
- Microsoft Office Suite (Excel VBA Macros)

Technical Documentation

- Technical reports, engineering documentation
- Drawing and schematic review
- Engineering change documentation
- Standards compliance documentation

Fabrication & Prototyping

- 3D printing and rapid prototyping
- Mechanical assembly
- Precision measuring equipment
- PCB fabrication

Electrical Design & Testing

- Electrical circuit design and schematic capture
- Test and measurement equipment (oscilloscopes, multimeters, power supplies, function generators)
- Electronics troubleshooting and repair
- PCB assembly and soldering (THT & SMD)
- Embedded systems programming (Python, C++)

Workplace Skills

- Reliable and detail-oriented, with a strong commitment to completing tasks to a high standard.
- Work effectively both independently and as part of a multidisciplinary team.
- Quickly adapt to new environments, technologies, and engineering challenges.
- Committed to continuous learning and developing new technical skills.
- Strong organizational skills with the ability to manage documentation, prioritize tasks, and meet project deadlines.
- Effective communicator who collaborates well with team members to achieve project objectives.

Clubs & Volunteer Experience

IEEE MLRC UBC Okanagan Student Branch

Sep 2022 – May 2026

Lab Monitor, Workshop Host and Volunteer, Peer Tutor

- Hosting the 2022, 2023, and 2025 PCB design workshop, where I taught students how to design a PCB starting from the schematic, sourcing parts, designing the PCB, ordering PCBs, and soldering SMD and THT.
- Guiding and helping students through personal projects, course projects, and capstone projects.

Interests and Activities

- Amateur Radio - Long distance HF communications. Design and construction of home-made radio receivers, transmitters, antenna solutions, and transmission lines.
 - Analog Electronics - I enjoy developing circuits & PCB design for analog electronics for audio systems, RF systems, and modular synthesizers.
 - Outdoor activities - Skiing, Swimming, Off-Road, Camping, Marksmanship, and Hiking.
 - Music - I play Piano and have been tinkering around making my own instruments.
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