Melanie Kung

Progressive positions leading to leadership roles in science, engineering, and technology.

Seeking full-time co-op opportunities from Sep 2025 – Apr 2026.

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SUMMARY OF QUALIFICATIONS

Technical: mechanical testing, microfabrication, materials sciences, electrical circuits, analytical and computational methods

Softwares: SOLIDWORKS, AutoCAD, COMSOL, Microsoft Office, G Suite, MailChimp, MIDI, ProPresenter, AbelDent

Languages: MATLAB, Python, JavaScript, Qiskit, VBA, HTML, CSS, LaTeX, C++

PROFESSIONAL EXPERIENCE

Materials Lab Assistant, Seaspan *North Vancouver, BC* Jan 2025 – Apr 2025

- Accurately prepared **100+** specimens and measured and reported data for mechanical testing – **Vickers hardness, Rockwell hardness, Charpy impact, tensile test**.
- Conducted **case study research** and mechanical testing to examine the effect of rewelding on steel.
- Created weld drawings using **AutoCAD** to illustrate welding, cutting, and testing parameters.
- Supported in the management and organization of the lab database including procedures, reports, and data using **Microsoft Office** tools.

Engineering Student, Canada Post *Toronto, ON* May 2024 – Aug 2024

- Applied **lean manufacturing** and **process management** principles to develop problem statements action plans for process engineering and streamline data collection.
- Developed **VBA** macros in Microsoft Excel to improve efficiency of data analytics.
- Liaised with stakeholders at multiple levels by leading presentations.

File Clerk, Dr. Serene Yu Dentistry *Ottawa, ON* Aug 2021 – Sep 2022

- Efficiently sorted and organized **100+** files per day to maintain database organization.
- Performed detail-oriented tasks e.g., cross-referencing and file purging using **AbelDent**.

PROJECTS

Online Library Mar 2025 – Present

- Designed and created custom graphics using **HTML** and **CSS** to create seamless integration of visual and functional components.
- Created visually appealing graphics and optimized design elements to ensure a cohesive and responsive user interface across devices.

Battleship Nov 2023 – Dec 2023

- Developed a Battleship game using **Python**, integrating dynamic **Pygame** graphics and a randomized game setup to enhance user experience.
- Implemented grid-based game logic using arrays to track ship positions, player moves, and game state, enabling validation of hits, misses, and win conditions.
- Implemented conditional logic and user input/output to improve engagement and functionality.

EDUCATION

BASc University of Waterloo, Nanotechnology Engineering 2023 – 2028

- Dean's Honours List