

Nicholas Medland

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TECHNICAL SKILLS

Programming Languages: Java, C, C++, Python, Swift, JavaScript, TypeScript

Technologies & Tools: Fusion, Bambu Studios, Github, Prisma, RESTful APIs, NumPy, Matplotlib, Xcode

Operating Systems: Windows, macOS

FREELANCE

Designer and Fabricator

Feb 2026 - Present

- Commissioned to design and manufacture custom-fitted containers, holders, organizers, and components used throughout quick-service stands and premium dining restaurants within Rogers Arena and top-table restaurants across Vancouver.
- Collaborated with managers and staff to design custom CAD models in Autodesk Fusion, producing iterative 3D-printed prototypes and final parts while incorporating feedback to improve usability, durability, and workflow efficiency.

ACADEMIC PROJECTS

Electronics & Mechanical Systems Designer | Casino Card Shuffler

Sept - Dec 2025

Engineering, Science and Society (ENSC 100W)

- Designed and 3D printed millimeter precision mechanical components in Shapr3D for an automated card shuffler.
- Integrated an Arduino with motors, sensors, buttons, and remote-control functionality to automate shuffling operations.
- Engineered the shuffling mechanism to increase card randomization compared to consumer-grade shufflers through iterative prototyping, mechanical refinement, and electronics integration.

Backend Developer | SFU HUB

Sept - Dec 2024

Introduction to software development (CMPT 276)

- Developed and optimized RESTful APIs for a student platform by integrating transportation and dining features, enhancing usability and efficiency.
- Implemented database queries using Prisma to ensure efficient data retrieval, and reducing query time.
- Wrote unit tests to validate backend functionality, increasing system reliability and reducing production errors.

PROFESSIONAL EXPERIENCE

Premium Server and Bartender

Aug 2023 - Present

Canucks Sports Entertainment, Vancouver, BC

- Delivered high-end dining experiences by setting up and maintaining premium service standards.
- Provided discreet, first-class service to an elite clientele of billionaires, company founders, celebrities, athletes, and top executives, consistently elevating their premium experience.

Technician

Jun 2024 - Aug 2025

Lang's Venture Inc, Langley, BC

- Installed, troubleshooted, and maintained lottery equipment for retailers, minimizing downtime and ensuring operational continuity.
- Provided technical support and diagnostics, resolving system malfunctions quickly and improving system efficiency.

Election Equipment Officer

Sep - Nov 2024

Elections BC, Coquitlam, BC

- Programmed and tested voting machines and office automation systems to ensure proper functionality, preventing operational disruptions.
- Set up election offices and coordinated logistics, facilitating a smooth voting process for 23,116 voters.
- Served in multiple election roles across different years, including Alternate Presiding Election Official, Voting Equipment Officer, Ballot Issuing Officer, and Information Officer ensuring procedural integrity.

EDUCATION

Bachelor of Applied Science, major in Electronics Engineering

Expected August 2029

Simon Fraser University, Burnaby BC