PROJECTS -

uniMatch

Hackathon Project, nwHacks 2023 | 2023-01

 Implemented the backend database (Firebase) and user authentication (Google auth) for a Vue.js college search tool that uses an interactive dating-app-style interface (github.com/wesrchow/uniMatch)

Legacy of North

Personal Project, Burnaby North Secondary | 2020-02 - Present

- Captured 360-degree photography of 250+ locations to preserve the school's history before demolition of the old buildings
- Developing a showcase website using HTML/CSS/jQuery and other libraries in a Google Street View style

Writing Robot

Science Fair, Burnaby North Secondary | 2017-10 - 2018-01

- Designed and built a writing robot leveraging 3D printed parts and Arduino electronics such as a CNC shield, stepper and servo motors
- Implemented the writing systems using software tools: Inkscape, G-code, Arduino (C/C++), Grbl-servo firmware

TECHNICAL EXPERIENCE -

Vice President & Workshop Director VikingsDev, Burnaby North Secondary | 2020-09 - 2021-06

- Created and presented beginner Python and Python Flask workshops to 20+ students, covering the basics of programming concepts
- Coordinated the production and delivery of workshops produced by the team

Co-Founder & Vice President BNS Drone Club, Burnaby North Secondary | 2016-11 - 2021-06

- Taught 80+ students of varying skill levels about drone technology with \$5000 in PAC funding over 4 years
- Developed and conducted club meetings featuring technical lessons, handson with drone electronics and drone piloting instruction

Electronics Recycling Technician Free Geek, Vancouver, BC | 2017-07 - 2019-09

- Verified functionality of donated graphics cards and computer peripherals to be sold at the second-hand electronics storefront
- Dismantled computers, laptops and other electronics for recycling

Technology Assistant

Aquilini Group - Pizza Hut Head Office, Vancouver, BC | 2018-03

Configured Intel NUC point of service LINUX servers for Pizza Hut restaurants

OTHER WORK EXPERIENCE -

Polling Clerk | Elections Canada, Burnaby, BC | 2019-09

Recorded voters' information, counted and validated ballots

Fair Ambassador | Pacific National Exhibition, Burnaby, BC | 2019-08 - 2019-09

Patrolled and offered guest services in various locations

EDUCATION -

BASc, Computer Engineering

The University of British Columbia Expected 2026-05

SKILLS -

Programming

- C/C++ (OOP)
- Python (Scripting)
- Java (& Android)
- JavaScript
- HTML/CSS
- ARM64 Assembly
- SystemVerilog
- G-code

Software Tools

- UNIX/LINUX
- GitHub (VCS)
- JetBrains IDEs
- Google Cloud (GCP)
- JUnit
- Firebase (Database & Auth)
- SolidWorks/Inventor (CAD)
- ModelSim
- Ouartus Prime

Hardware

- Arduino/Raspberry Pi (Microcontroller/Embedded)
- Electronics/Circuits
- 3D Printing
- FPGA
- Drones
- Soldering
- Multimeter/Oscilloscope

PORTFOLIOS —

LinkedIn

linkedin.com/in/wesrchow

Hardware, Software & Media

- instagram.com/westechacc_
- youtube.com/@Wgesh8