Nicholas Carr

Science Co-op

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Skills

Programming	Node.js, TypeScript, Vue, Python, Java, HTML, JavaScript, CSS, C, Arduino
Engineering	SolidWorks, Altium, MATLAB
Certifications	Standard First Aid, AED, CPR Level C, WHMIS, G Suite

Work Experience

QA Testing Co-op – Edsby **Feb – Jun 2018**

- Tested preview versions of the web app, used a ticketing system to report bugs before they were sent to customers
- Participated in and edited an interview video describing the benefits of the product for parents
- Created demo posts and assignments to show potential customers what a classroom could look like if they were using the product
- Wrote a Python script to combine datasets from two CSV files, migrating data to a new format

Full-Stack WordPress Developer - Zoom Digital **Jul – Aug 2017**

- Built a website for a client using HTML/CSS starting from a Bootstrap template
- Used Gulp to automate responsive image resizing and insert the responsive image set onto the site
- Wrote blog posts and product information pages for another client, uploaded it to WordPress
- Used PHP to modify a WordPress template to the client's specifications

Technical Projects

Comms Sub-Team Member - UBC Orbit **Sep 2019 – present**

- Using software-defined radio to test prototype radio hardware
- Working on a Python-based serial test client for satellite-mounted radio hardware
- Writing unit tests for the test client using the Python unittest module

Video Doorbell Project **Aug 2020**

- Wrote firmware using Arduino IDE to stream video from an off the shelf ESP32 camera module
- Implemented MJPEG video streaming and MQTT telemetry and control
- Integrated camera into Home Assistant home automation platform

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Technical Projects (cont.)

Autonomous Claw Project – APSC 101 **Feb 2020**

- Built an autonomous claw to pick up spilled pasta in a team of 4 as part of Intro to Engineering course
- Used Arduino microcontroller, servo motor, and fabricated sheet metal parts using hand tools
- Created the engineering drawings for the device using SolidWorks

Co-founder - Cursor **Sep 2017 - Jun 2019**

- Managed 9 volunteers and hosted 2 technology-related events
- Co-lead a 3-hour React Native workshop for 20 attendees aged 12-16 Jul 2018
- Organized a 12-hour hackathon for 18 participants Feb 2019

Thinq – THacks 2 **Oct 2017**

- Used Node.js and Twilio to create a service that would return weather, directions, and other info if requested via text message, so people without mobile data could still get information
- Integrated features in a fast-paced environment; built service within 36-hour time limit
- Won first place at THacks 2

Education

Second-year Engineering Physics student at the University of British Columbia 2019-2024