

Armaan Kara

Full-Stack Software Developer

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Experience

Frontend Developer @ Resonance Consulting

September 2021 – December 2021 // Vancouver, BC

- Contracted as a Frontend Web Developer to design and build a [custom website](#) for the consulting firm, Resonance Consulting
- This multi-page website developed with React creates a solid digital experience for potential clients, enabling Resonance Consulting to gain more leads
- Hosting and backend is done through Netlify, with contact form submissions streamlined to directly appear in the company's email inbox.
- Google site verification was done to help improve search engine optimization and site validity

Software Engineer @ UBC AgroBot (Navigation Systems Team)

April 2021 – Present // Vancouver, BC

- Developing self-driving software for a rechargeable 4-wheeled robot to be able to automatically maneuver crops rows, exterminate weeds and deliver precise fertilization
- Work with the applied principles from computer vision (image denoising, image filtering, Hough Line transform) in Python and OpenCV to make the robot navigate through crop rows
- Regularly communicate and collaborate with other sub-teams of engineers and designers
- Currently working on an algorithm to center the robot within the row using on-board cameras

Directed Studies Researcher @ UBC Institute for Resources, Environment, and Sustainability

September 2020 – December 2020 // Vancouver, BC

- Worked directly alongside two professors from the Institute for Resources, Environment, and Sustainability, to develop a project aimed to promote individual climate actions by creating a smart personalized carbon calculator to empower people in BC to take actions to reduce their carbon footprint
- Gathered and analyzed data from over 50 individuals and helped educate 70% of them on their carbon intensive activities
- Created an environmentally-aware survey through an expansive literature search, developed an excel spreadsheet for calculations, analyzed Canadian governmental policy data, wrote a paper, and presented my findings to a group of over 20 people

Projects

Portfolio Website

- Designed, built, and deployed my current portfolio website using React, HTML, CSS and Netlify
- Code has been optimized in various browsers and devices to ensure consistent cross-browser compatibility and mobile responsiveness
- Has a Google web developers score of 98/100 for page speed

Rate My Residence (RMR)

- Currently developing a MERN stack (React, Node.js, Express, and MongoDB) web app that will allow users to review UBC's residence
- The goal of this project is to allow students to help other students by writing reviews of current residence conditions (food, cleanliness, community, etc.), so that students can make better informed decisions about their housing accommodations on campus

Skills

Programming Languages

JavaScript (ES6), HTML, CSS, Python, R

Libraries & Frameworks

React, Node.js, Express, Mongoose

Tools & Platforms

Git, Github, Netlify, Heroku, MongoDB, VSCode, Jupyter Notebooks

Education

University of British Columbia (UBC)

2016 – 2021 // Vancouver, BC

Bachelor of Science in Chemistry, Life Sciences & Earth and Environmental Sciences

Extracurriculars

Writer for Ubyyssey student newspaper

Researched, interviewed, wrote, edited and, published an article to the UBC student newspaper that received lots of positive feedback. "[Hundreds of thousands of your fee dollars are sitting in AMS fund reserves](#)"

UBC BOLT – 24-hours Data Analytics Case Competition

Won 4th place overall in UBC's biggest Datathon through leveraging both business consulting analyses and data-centric analysis techniques

Executive Member of Science Undergraduate Society (SUS) Budget and Grants Team

Helped to manage spending of the \$250,000 SUS budget, by allotting money to clubs, students, events and grants

Interests

Skiing, weight-lifting, traveling, reading, photography