Parker Rowe

Web & Computer Vision Enthusiast Seeking Summer 2023 Employment

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github.com/parkuman

Education

BASc - Computer Engineering, Innovation @ Queen's University 2018 - 2023 // Kingston, ON

- → Enrolled in a 60-person specialized stream partnered with the Smith School of Business focused on entrepreneurship and business innovation
- → Relevant Coursework: Algorithms, Compilers, Operating Systems, Machine Vision, Data Structures, Object Oriented Programming, Databases, Computer Architecture

Technical Experience

Software Development Intern @ Ericsson
May 2021 - September 2022 // Ottawa, ON

- → Led Full-stack development of a new VPN certificate system using React, NextJS, Docker, and OpenVPN, for Ericsson Response and the UN to securely manage access to networks during disaster relief missions. Now used by volunteers around the world.
- → Designed & deployed a Kubernetes-scaled AI material prediction feature for Ericsson Indoor Planner to predict user-uploaded floorplan's materials
- → Developed and create tests of new features for Ericsson Indoor Planner's backend API in C#

Al & Computer Vision Developer @ Queen's AutoDrive Team Sept 2021 – Present // Kingston, ON

- ightarrow Develop the team's traffic light classifier ROS node for use in the <u>SAE AD Challenge</u>
- ightarrow Architected a documentation pipeline for the team's Perception Python library
- → Deployed the team's website and a work breakdown structure tool using the JIRA API

Vice Captain/Al Team Manager @ Queen's Robomaster Design Team May 2019 - May 2021 // Kingston, ON

- → Led the operations of a 50+ member campus design team to build 6 robots to compete in the 2021 DJI International Robomaster competition in Shenzhen, China
- → Successfully trained and deployed a custom object detection model using Tensorflow, SSD MobileNetV2, Python & OpenCV to detect enemy robot armour
- → Planned and led weekly team workshops for 20+ members, working toward the implementation of our plate detection model on a Nvidia Jetson Nano

Software Developer @ Distributive

July 2020 - April 2021 // Kingston, ON

- → Led Full-stack development on <u>Looking Glass</u> project, implementing a feature for predicting & visualizing COVID cases based on Ontario lockdown scenarios by city
- → Architected & implemented a solution for initialization of different compute worker environments in Node & vanilla web JavaScript. Now in production on a network of thousands of different computers with heterogenous compute capability

Web Developer @ Canadian Undergraduate Conference on AI May 2020 — April 2021 // Kingston, ON

- → Redesigned and developed the cucai.ca website using React and Gatsby
- → Created branding guidelines, marketing material, and design plans using Figma to advertise North America's largest undergraduate Al conference

Projects

Roggle – AR + WebAssembly Powered Boggle Solver

Spring 2022 — roggle.prowe.ca
Using WebAssembly, OpenCV,js,
TensorFlow.js and Rust I created a webapp
that allows users to take a photo of their
Boggle board and it will provide a list of all
possible solutions.

My Portfolio + Blog

Winter 2021 - prowe.ca

My personal blog & portfolio Site built using Svelte + SvelteKit using Notion as a Content Management System.

AlarMe – 'Smart' Alarm Clock May 2020

A specialized Wi-Fi **Arduino** alarm clock that beeps, vibrates, and can only be snoozed by getting out of bed and tapping an NFC tag placed elsewhere in your home. Companion app for setting and snoozing alarms made using **Flutter** for Android and iOS.

Skills

Programming Languages

JavaScript/TypeScript, Python, C, C#, Java, HTML, CSS, Rust

Libraries & Frameworks

OpenCV, TensorFlow, ROS, React, Next.js, Node, Svelte

Tools & Platforms

Git, Docker, Kubernetes, Azure, GCP, AWS, JIRA, Vercel, NVIDIA Jetson, Linux, Windows, Bash, Netlify, Figma, MySQL

Other

Self-learning, Agile Development, Report Writing, Initiative, Leadership, UX Design, Teamwork, Communication

Interests

Camping, Running, Cooking, Guitar, Climbing, Learning, & Gaming