

Parker Rowe

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Technical Experience

Software Developer @ Freelance

April 2023 – Present

- Develop and deploy websites for clients, showcasing proficiency in various full-stack environments and build tools, in addition to vanilla HTML, CSS, and JavaScript
- Collaborate closely with clients to understand their business objectives and translate those into intuitive, and performant web experiences.
- Proactively practice with emerging web technologies, continuously expanding technical knowledge, allowing for innovative new solutions to benefit the end-user.

AI & Computer Vision Developer @ Queen's AutoDrive Team

Sept 2021 – April 2023

- Designed and implemented 2D traffic light classification systems using ROS and Tensorflow for use in our autonomous vehicle for the SAE AutoDrive II Challenge
- Architected a GitHub actions documentation pipeline for the team's Python library.

Software Developer @ Ericsson

May 2021 – August 2022

- Volunteered to lead full-stack development of a new VPN certificate system using TypeScript, React, NextJS, Docker, OpenVPN, and tested with Cypress. Our team of 4 interns developed a web app that allows Ericsson Response and the UN to securely manage access to private networks during disaster relief missions. Now used by Ericsson Response and UN Volunteers around the world.
- Designed, documented, and deployed a Kubernetes-scaled AI material prediction feature in Azure for Indoor Planner to predict floorplan materials given an image.
- Developed and unit tested new features for Ericsson Indoor Planner's .NET API.
- Doubled multithreaded performance of a Java RPC-based API

Software Development Intern @ Distributive

July 2020 – April 2021

- Led full stack development on a using TypeScript, Node, and GraphQL, implementing a feature for predicting & visualizing COVID case based on Ontario lockdown levels.
- Architected & implemented a solution for initialization of different web workers for Node & browser JavaScript runtimes. Now in production on a network of thousands of different computers with heterogenous compute capability.

Vice Captain & AI Team Manager @ Queen's Robomaster Design Team

May 2019 – May 2021

- Led the operations of a 50+ member design team to build 6 robots to compete in the 2021 DJI International Robomaster competition in Shenzhen, China
- Successfully led a team of 20+ members to train and integrate a custom object detection model using Tensorflow, SSD MobileNetV2, Python & OpenCV for detection and aiming at enemy robot armour plates.

Web Developer @ Canadian Undergraduate Conference on AI

May 2020 – April 2021

- Redesigned and developed the 2021.cucai.ca website using React and Gatsby
- Created branding guidelines, marketing material, and design plans using Figma to advertise North America's largest undergraduate AI conference.

Education

BASc - Computer Engineering

Queen's University, Kingston, ON

2018 – 2023

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

Projects

Live Speaker Identification and Speech Transcription

github.com/parkuman/capstone

My culminating undergraduate project that leverages OpenAI's Whisper, enabling live audio transcription and speaker identification – all without an internet connection.

CBC Article Summarizer

cbc-summarizer.prowe.ca

Built a website to summarize any given CBC article using Cohere's Large Language Model-based summarize API.

Roggle – A WebAssembly Powered Boggle Solver

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.

Portfolio + Blog

prowe.ca

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

Interests

Camping, Running, Cooking, Guitar, Climbing