Parker Rowe

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github.com/parkuman

Education

BASc - Computer Engineering @ Queen's University 2018 - April 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

Al & Computer Vision Developer @ Queen's AutoDrive Team Sept 2021 – Present

- → Design and implement 2D perception systems using ROS for use in our autonomous vehicle for the SAE AutoDrive II Challenge
- → Architected a documentation pipeline for the team's perception Python library
- → Developed the team's website and work breakdown structure tool using the JIRA API

Software Development Intern @ Ericsson May 2021 - August 2022

- → 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 in Azure for Ericsson Indoor Planner to predict user-uploaded floorplan's materials
- → Developed and tested new features for Ericsson Indoor Planner's backend .NET API

Software Developer @ Distributive July 2020 - April 2021

- → 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 environments. Now in production on a network of thousands of different computers with heterogenous compute capability

Vice Captain/Al 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

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

Projects

Roggle – A 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