# **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
- ightarrow 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
- → Created branding guidelines, marketing material, and design plans using Figma to advertise North America's largest undergraduate AI conference

## **Projects**

#### **CBC Article Summarizer**

Winter 2023 -

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

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 — <a href="mailto:prowe.ca">prowe.ca</a>
My personal blog & portfolio Site built using
Svelte + SvelteKit, using Notion as a
Content Management System.

### 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