# Yasen Behiri

yasen.ca ybehiri@uwaterloo.ca linkedin.com/in/yasenbehiri github.com/smolbrainer

## **EDUCATION**

## University of Waterloo

September 2025 - April 2030

Bachelor of Software Engineering - Honours/Co-op

• Relevant Coursework: Object Oriented Programming, Programming Principles, Embedded Systems, Data Structures

#### EXPERIENCE

## Software Engineering Intern

 $September\ 2025-Present$ 

Remote

Heavy Influence

- Developing a mobile-first app for creators to schedule and publish videos from a single platform.
- Supporting cross-platform posting across TikTok, Instagram Reels, YouTube Shorts, and Facebook Reels.
- Integrated posting APIs with **OAuth**, enabling **500MB+ uploads** and multiple accounts per platform.
- Built scheduling engine for **365-day publishing** with timezone-aware triggers and caption customization.
- Designed backend using **Firebase** for user data, account linking, subscription tiers, and scheduled post management.
- Building analytics dashboard to visualize cross-platform metrics like views, likes, and engagement growth.

#### Software Engineering Intern

Mav 2025 - August 2025

Savi Finance

Toronto, ON

- Launched Social Insights dashboard in React/Redux, rapidly scaling to 1K+ weekly active users in 6 weeks.
- Built Chrome extension to auto-sync checkout data across platforms, cutting manual transaction entry by 90%.
- Engineered GraphQL API with Apollo, achieving 170ms p95 latency while handling 50K+ transactions/month.
- $\bullet \ \ {\rm Integrated} \ \ {\bf Coinbase} \ \ {\bf Wallet} \ \ {\rm sync} \ \ {\rm for} \ \ {\bf 1.3K+\ accounts}, \ {\rm achieving} \ \ {\bf 95.2\%} \ \ {\bf automated} \ \ {\bf balance} \ \ {\bf accuracy}.$
- Implemented tests with **Jest** and **Cypress**, increasing deployment reliability and maintaining **92**% code coverage.

#### PROJECTS

## TradeSmart AI | React, Flask (Python), Random Forest, Chart.js, Firebase

- Built a full-stack trading platform with **React** and **Flask**, enabling real-time stock and trade tracking and simulations.
- Designed dynamic, interactive financial charts using Chart.js and used Firebase for seamless real-time data syncing.
- Improved performance with **24-hour prediction caching**, lazy loading, and a responsive glassmorphism UI.
- Implemented Random Forest models using 25+ features to generate 1-year price forecasts with confidence scoring.

### StepGuide | Python, PyTorch, OpenCV, YOLOv11, COCO, Coqui TTS, TensorRT

- Built an assistive wearable using Python, PyTorch, and OpenCV for the visually impaired.
- Enabled 30+ FPS real-time object detection and accurate audible navigation through integrated speech output.
- Trained and deployed a custom YOLOv11 model on COCO, reaching 96% accuracy across 80+ classes.
- Integrated Coqui TTS for continuous, context-aware real-time narration of detected surroundings.
- Optimized inference via  $PyTorch \rightarrow ONNX \rightarrow TensorRT$  pipeline with FP16 precision.
- Achieved 120ms latency on Jetson Orin Nano using parallel GPU acceleration for efficient edge deployment.

## Get "Stuff" Done | React Native, FastAPI, Stripe, Twitter/X API, OpenAI, Gemini, MongoDB

- $\bullet$  Developed a full-stack **React Native** + **FastAPI** app that gamifies habit tracking for better accountability.
- Implemented penalties like spam texts, AI calls, donations, and public Twitter/X posts when tasks are missed.
- Built secure payment flows with **Stripe** for auto donations, resolving OAuth and webhook issues for reliable execution.
- $\bullet$  Designed MongoDB schema and event-driven backend for habits, penalties, and uploads, ensuring 24/7 operation.
- Leveraged OpenAI & Gemini LLMs with Fetch.ai agents for dynamic text generation and SMS voice prompts.

## Cryptocurrency Twitter Bot | Python, Tweepy, RegEx

- Developed a **Python** Twitter bot that searches for tweets containing contract addresses of new cryptocurrencies
- Automated data extraction using the Tweepy library to help users discover emerging crypto projects.
- Implemented RegEx to filter and validate contract addresses from tweets, streamlining crypto project discovery.

#### Dino Game Auto-Jump System | Arduino, C, Ultrasonic Sensor

- Engineered an ultrasonic sensor system to detect object speed and trigger the Dino jump in Google's offline game.
- Programmed the system using Arduino and C, integrating analog sensor data with game controls.

## TECHNICAL SKILLS

Languages: Python, C, C++, Java, JavaScript, Ruby, SQL, HTML, CSS, MATLAB

Frameworks/Libraries: React, React Native, Node.js, Ruby on Rails, GraphQL, Firebase, MongoDB

Tools & Platforms: Git, Linux, Docker, MySQL, Jira, Postman, GTest, Google Cloud