Yasen Behiri

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EDUCATION

University of Waterloo — September 2025 - May 2029
Bachelor of Software Engineering - Honors/Co-op, Joint Honors Computing & Optimization — *GPA: 3.93/4.0*
- Relevant Coursework: Object-Oriented Programming, Programming Principles, Embedded Systems, Data Structures

EXPERIENCE

Software Engineer Intern — January 2026 – Present
Hawala — *NYC, NY*
- **Incoming Winter 2026**

Machine Learning Engineer — September 2025 – Present
WatStreet — *Waterloo, ON*
- Trained **PyTorch** CIFAR-10 classifier to **96.8%** accuracy while cutting training time by **12%** via augments/scheduling
- Built **Monte Carlo** option pricer (**5K+** paths/contract), keeping prices within **8%** of **Black–Scholes** across backtests
- Built multi-agent US economy simulator with **LLM** agents mapping household and firm actions to interest rates
- Jointly trained shared policy and aggregator on historical macro data, enabling differentiable interest-rate forecasting

Founding Engineer — September 2025 – December 2025
Heavy Influence — *Toronto, ON*
- Launched **React Native** creator app from scratch, shipping MVP in **6 weeks** and onboarding **120 creators** into beta
- Integrated **Meta**, **TikTok**, and **YouTube** with **OAuth**, enabling multi-account linking with **99%** auth success
- Built timezone-aware scheduler using **Cloud Tasks + Cloud Scheduler** to reliably process up to **10K jobs/day**
- Designed **Firebase** backend for accounts, subscriptions, and scheduled posts, supporting up to **300K+ posts/month**

Software Engineering Intern — May 2025 – August 2025
Savi Finance — *Toronto, ON*
- Launched Social Insights dashboard in **React & Redux**, scaling to **1K+ weekly active users** in 6 weeks
- Engineered **GraphQL** API with **Apollo**, cutting median latency by **2x** while handling **50K+ transactions/month**
- Integrated **Coinbase Wallet** sync across **13K+ accounts**, reaching **95.2%** automated balance accuracy
- Implemented tests with **Jest** and **Cypress**, catching regressions pre-release and maintaining **92%** code coverage

PROJECTS

TradeSmart AI | *React, Flask (Python), Random Forest, Chartjs, Firebase*
- Built a full-stack trading platform with **React** and **Flask**, enabling real-time stock tracking and trading for retail users
- Designed dynamic, interactive financial charts using **Chart.js** and wired **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 on **25+** market indicators to generate 1-year price forecasts

StepGuide | *Python, PyTorch, OpenCV, YOLOv11, COCO, Coqui TTS, TensorRT*
- Built smart glasses using **Python**, **PyTorch**, and **OpenCV** to guide visually impaired users through real-world spaces
- Enabled **30+ FPS** real-time object detection with accurate audible navigation via integrated speech output
- Trained and deployed a custom **YOLOv11** model on **COCO**, reaching **96%** accuracy across **80+** everyday objects
- Optimized inference via **PyTorch → ONNX → TensorRT** pipeline with **FP16** precision on edge hardware
- Achieved **120ms** latency on an **Nvidia GPU** by parallelizing GPU workloads and trimming pre/post-processing

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

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