Jonathan Ishak

519-694-8754 | jonathan.r.ishak@gmail.com | linkedin.com/in/jonathan-ishak

EDUCATION

University of Western Ontario   Sept. 2023 – Present
B.E.Sc. Software Engineering   *London, ON*
- GPA: 3.7. Dean's Honor List

EXPERIENCE

Project Lead   August 2025 – Present
Western Formula Racing   *London, ON*
- Increased telemetry reliability for 50+ engineers, as shown by 0 data-loss incidents during tests, by deploying a Dockerized DAQ stack on an AWS VPS (Amazon Linux).
- Enabled real-time monitoring during all race test sessions, measured by sub-200ms dashboard latency, by building a React + FastAPI telemetry interface.
- Achieved stable wireless CAN streaming at racing speeds, validated by less than 1% packet drop, by developing a custom ESP32 Wi-Fi hotspot streaming CAN via UDP.
- Improved data ingestion throughput, as measured by a 3× faster upload pipeline, by implementing a secure file uploader parsing CAN logs into InfluxDB database.

Full-Stack Developer   August 2024 – May 2025
King's Psychology Association   *London, ON*
- Doubled club visibility, verified by +20 new users in the first month, by shipping an optimized React + Tailwind landing page on Vercel and designed on Figma.
- Enabled real-time event updates, validated by 100% API uptime post-launch, by building PostgreSQL serverless endpoints secured with JWT.
- Reduced admin event update time by 70%, as measured through workflow timing, by building a streamlined event management interface.

PROJECTS

RightCode | *SwiftUI, FastAPI, Docker, AWS SQS, Redis*   August 2025
- Achieved accurate handwritten code execution, validated by 90%+ OCR transcription accuracy, by integrating Hugging Face's nanonets-OCR-s model.
- Increased execution reliability across languages, measured by hundreds of sandbox runs, by building Docker-isolated Python/JS/Java runtimes.
- Improved backend scalability, shown by 4× higher task throughput, by implementing Celery workers with Redis and AWS SQS queues.
- Reduced deployment friction, measured by reproducible builds, by containerizing the full system with Docker Compose.

Carbon eMission | *React, Express.js, PostgreSQL, OpenAI API*   March 2025
- Boosted user engagement, measured by 3× leaderboard activity, by building a reactive Vite + Tailwind UI.
- Improved recommendation accuracy, validated through judge scoring, by integrating OpenAI GPT-4o with emissions data.
- Increased data reliability, seen in consistent logs across sessions, by building a secure Express.js + PostgreSQL backend (REST API) with JWT authentication.

Elite Finish Auto Landing Page | *React, NextJS, TailwindCSS*   May 2025
- Increased site traffic 200%+, measured by 180+ new visitors in month one, by developing an optimized Next.js + Tailwind landing page.
- Raised customer inquiry conversions, shown by increased Formspree submissions, by implementing a mobile-first responsive UI.
- Improved delivery alignment, indicated by rapid client approval, by iterating UI/UX with stakeholders.

TECHNICAL SKILLS

Languages: Java, Python, SQL, HTML5, CSS, JavaScript, TypeScript, Swift, C#, C++, C
Frameworks: React, Node.js, NextJS, Express, FastAPI, Flask, TailwindCSS, Spring, Django, React Native, AngularJS
Tools: Docker, AWS, GCP, Firebase, Git, Vercel, Postman, Figma, Grafana, MongoDB
Libraries: pandas, Framer Motion, PyTorch, boto3, scikit-learn