Nathan Card

613-921-6990 | ncard24@gmail.com | linkedin.com/in/nathan-card-dev | github.com/natecard

SUMMARY

Seasoned entrepreneur and business leader transitioning to software engineering after 8+ years of successful ownership and operations management. Nearing completion of a Master's in Computer Science with a strong foundation in AI, machine learning, and data analytics. Adept at understanding business requirements and technical specifications to develop innovative solutions. Innate problem-solver and quick learner, thriving in dynamic team environments.

EDUCATION

University of York — York, UK

Master of Science in Computer Science: Artificial Intelligence — *May 2023 – May 2025*

- Relevant Coursework: Artificial Intelligence and Machine Learning, Advanced Data Structures and Algorithms, Applied Artificial Intelligence, Big Data Analytics, Advanced Programming Techniques, Software Engineering.

PROJECTS

Generative AI Prompter | *Python, Langchain, Streamlit, Ollama* — Mar. 2024 – Present

- Developed a Python-based program to refine and optimize prompts using open source large language models (LLM) to perform natural language processing (NLP).
- Integrated Langchain's language model capabilities to fine-tune the prompt generation process.
- Designed a user-friendly interface for seamless prompt input, output, and iterative refinement.
- Documented the architecture, functionality, and usage guidelines for maintenance and future enhancements.

Pomodoro Timer | *Rust, Next.JS, Tauri* — Nov. 2023 – Jan. 2024

- Developed a cross-platform Pomodoro timer application using Tauri for full functionality on macOS and Windows.
- Utilized Rust for the backend, capitalizing on its performance and reliability, and integrated it with Next.js.
- Implemented the Pomodoro method, including work intervals and breaks, to help users boost productivity levels.
- Crafted a user-friendly interface with intuitive controls, visual timers, and customization options to cater to individual user preferences.

British Radio Tower Tracker | *Python, Seaborne, NumPy, Pandas, Matplotlib* — Sept. 2023 – Dec. 2023

- Built a robust data extraction and processing pipeline to track 180+ British radio towers, leveraging Python's capabilities for large datasets.
- Implemented data validation and error-handling to ensure integrity and reliability of the radio tower information.
- Designed data visualizations using Seaborn and Matplotlib, enabling users to easily interpret and analyze the radio tower data with a proven accuracy of 95+%.

EXPERIENCE

Student Tutor — October 2023 – Present

University of York — *York, UK*

- Facilitate weekly tutoring sessions for CS students, leading to a 25% improvement in their project grades.
- Review code, debug issues, and provide constructive feedback to help students improve their programming skills and project deliverables.
- Demonstrate strong communication and interpersonal skills in facilitating discussions and fostering collaborative learning environments.

Head of Operations/Co-Founder — May 2015 – Sept. 2023

Wild Card Brew Co. — *Trenton, Ontario, Canada*

- Developed, managed, and updated an e-commerce store that generated $1.5M+ in revenue over 6 years.
- Managed a team of 6 employees to launch a hard goods company that achieved Nationwide distribution.
- Fostered a collaborative and mentorship-focused approach to build organizational capacity.
- Led a successful exit of the company to a strategic buyer in 2023.

TECHNICAL SKILLS

Languages: Python, SQL (Postgres), No-SLQ (MongoDB), Langchain, JavaScript, HTML/CSS, Rust, GraphQL
Frameworks: PyTorch, Jupyter, TypeScript, TensorFlow, React, Next.js, Node.js, TailwindCSS, FastAPI, Ollama
Developer Tools: Git, Github, Docker, Google Cloud Platform, VS Code, LaTeX
Libraries: pandas, NumPy, Matplotlib, Seaborne, scikit-learn, Django, Flask, Streamlit, Beautiful Soup, Tauri, Jest