NICHOLAS WYRWAS

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RESUME SUMMARY

Software engineering graduate and U.S. Marine Corps veteran with a proven track record in technical leadership, quality assurance, and full-stack AI-powered development. Experienced building production-grade applications across internships at Connectify, Radical AI, and Reality AI, with hands-on skills in Django, React, Vue.js, RESTful APIs, and AI/ML integration including RAG pipelines, vector search, and OpenAI APIs. Background in leading and mentoring teams, driving compliance, and implementing process improvements across FDA-regulated environments (ISO 13485, cGMP) reflects a natural ability to take ownership, guide others, and uphold high standards. Brings military-forged discipline, strong documentation practices, and a results-driven mindset to any engineering or leadership opportunity. Including roles in software engineering, quality assurance, or data-focused development.

EDUCATION

BS Computer Science – Software Engineering | Southern New Hampshire University
Graduated: November 1st, 2025
Manchester, NH
Southern New Hampshire University

- Honor Roll: Spring 2023, Fall 2023, Spring 2024
- Dean's List: Fall 2024, Spring 2025, Fall 2025

Relevant Coursework:

- **Software Engineering & Development**: Software Development Lifecycle, System Analysis & Design, Programming Languages, Foundations in Application Development, Current/Emerging Trends in CS
- **Cybersecurity & Reverse Engineering**: Software Security, Secure Coding, Software Reverse Engineering (C++/Assembly/Binary Translation, Legacy Code Reconstruction, Security Vulnerability Detection), Operating Platforms
- **Data & Algorithms**: Discrete Mathematics, Applied Linear Algebra, Applied Statistics for STEM, Data Structures & Algorithms (Analysis and Design), Structured Database Environments
- **Full-Stack & Mobile**: Client/Server Development, Full Stack Development I, Mobile Architecture & Programming, UI/UX Design & Development
- **Specialized & Technical**: Computer Graphics & Visualization, Emerging Systems Architecture & Technology, Introduction to Scripting, Intro Physics: Mechanics

Computer Science | McHenry County College
Crystal Lake, IL

TECHNICAL SKILLS & COMPETENCIES

Agile Methodologies (Scrum, Kanban)	Software Development Lifecycle (SDLC)	System Analysis & Design
Application Development	Database Management	API Integration
Secure Software Development Practices	Cybersecurity Awareness & Risk Management	Quality Assurance & Testing (TDD/QA)
Documentation & Technical Reporting	Continuous Improvement (Lean/Six Sigma)	Regulatory Compliance (FDA/ISO)
Training, Mentorship & Technical Team Leadership	Cross-Functional Team Collaboration	Conflict Resolution & Stakeholder Communication / Engagement
Deadline-Driven Project Execution	Problem-Solving and Debugging	Performance Optimization & Code Review

PROFESSIONAL EXPERIENCE

Autocare Technician | Walmart   **June 2025 – Present**

- Performed routine maintenance, diagnostics, and repair on customer vehicles to ensure optimal performance and safety.
- Conducted inspections of brakes, tires, fluids, and other critical vehicle systems to identify and resolve issues efficiently.
- Provided clear, professional guidance to customers regarding recommended repairs, maintenance schedules, and safety considerations.
- Documented service work accurately in company systems to maintain records and track completed maintenance tasks.
- Collaborated with team members to optimize workflow, maintain parts inventory, and meet daily service targets.
- Adhered strictly to safety protocols, company standards, and regulatory compliance requirements.

Generative AI Engineer (Internship) | Reality AI   **Dec 2024 – Apr 2025**

- Contributed to the development of Marvel AI, an AI Teaching Assistant, and Sky AI, an AI Career Coach, to transform education and career growth through generative AI technology.
- Built features for Marvel AI using technologies such as LangChain, LlamaIndex, and Retrieval-Augmented Generation (RAG) workflows.
- Implemented structured knowledge graphs to dynamically link educational content to relevant topics for efficient retrieval.
- Enhanced real-time semantic search and recommendations by leveraging OpenAI embeddings and Redis for Vector Search.
- Collaborated with a global team to develop open-source AI tools that make education more accessible.
- Deployed AI services using Google Cloud Run, monitored performance with Log Explorer, and refined outputs through LangSmith to optimize prompts and system outputs.

Full-Stack Developer (Internship) | Connectify   **Oct 2024 – Dec 2024**

- Designed and developed scalable web applications using Django for back-end architecture and modern front-end frameworks like React and Vue.
- Built and optimized RESTful APIs for seamless integration between user interfaces and server-side systems.
- Collaborated with UI/UX designers, QA engineers, and DevOps teams to create intuitive, production-ready solutions.
- Implemented and maintained CI/CD pipelines to automate testing, integration, and deployment workflows.
- Enhanced application performance through caching strategies, asynchronous task management, and analytics integration.
- Actively participated in agile practices, including sprint planning, daily stand-ups, and code reviews to deliver high-quality software.

Software Developer (Full-Stack) (Internship) | Radical AI   **April 2024 – Aug 2024**
- Created and maintained technical documentation for codebases, APIs, and workflows to support team collaboration and future development efforts.
- Built an AI career companion providing personalized coaching, mentorship, and support across all stages of the career lifecycle.
- Developed and maintained front-end features using React and Python to ensure seamless user interactions. Performed unit and integration testing to ensure software quality, identifying and fixing bugs throughout the development lifecycle.
- Integrated third-party APIs and services to expand application functionality and streamline workflows.

Manufacturing Process Leader - Training Department | Stryker Medical   **Dec 2019 – Jun 2023**
- Led the development and implementation of comprehensive manufacturing training programs aligned with cGMP and ISO 13485 standards.
- Managed staff onboarding, documented reviews, and cross-functional training to ensure readiness and regulatory compliance.
- Originated and approved Document Change Orders (DCOs), maintaining up-to-date SOPs and process documentation.
- Audited production floors regularly to ensure adherence to FDA and ISO 13485 requirements.
- Mentored new hires and junior team members, increasing retention and fostering a culture of accountability.
- Collaborated with stakeholders to address compliance gaps, refine processes, and align training with evolving business goals.
- Developed and tracked key performance indicators (KPIs) for onboarding efficiency, retention, and turnover analysis.

Needle Punch Operator | Stryker Medical   **Feb 2017 – Dec 2019**
- Conducted routine inspections and maintenance on equipment to ensure safe and reliable operation.
- Collaborated with the production team to meet daily manufacturing goals while maintaining strict adherence to quality control protocols.
- Documented production data and machine performance metrics to support process improvements and operational excellence.
- Managed raw material movement, roll stock, and performed light machine adjustments

Infantry Rifleman | United States Marine Corps (USMC)   **Aug 2013 – Dec 2016**
- Executed ground combat operations, operated diverse weapon systems, maintained equipment integrity, and contributed to reconnaissance missions with precision and professionalism.
- Operated and maintained a wide range of weaponry, communication systems, and field equipment, ensuring readiness and compliance with operational standards.
- Participated in reconnaissance and surveillance missions to gather actionable intelligence and support strategic decision-making.
- Trained and collaborated with team members to enhance combat readiness, adaptability, and overall mission success.
- Conducted tactical ground operations, including offensive and defensive maneuvers, to achieve mission objectives while ensuring team safety and operational efficiency.

FEATURED PROJECTS

Terminal Dashboard – Python TUI Developer Productivity Tool   **Feb 2026**
- Interactive terminal dashboard with system monitoring, Pomodoro timer, todo list, and RSS feeds using Textual/Rich frameworks
- Modular plugin architecture with 36 passing pytest unit tests and cross-platform support (macOS, Linux, Windows)
  - Tech Stack: Python 3.10+, Textual, Rich, psutil, Pydantic, pytest | GitHub: github.com/nwyrwas/terminal-dashboard

Neural-OS – AI-Powered Notes Application   **Jan 2026**
- Full-stack Full-stack app with semantic search using OpenAI embeddings, Pinecone vector database, and RAG pipelines for context-aware responses
- React frontend, FastAPI backend, Supabase authentication with Google/GitHub OAuth support
  - Tech Stack: React, FastAPI, OpenAI API, Pinecone, Supabase, PostgreSQL | GitHub: github.com/nwyrwas/neural-os

LedgerIQ – Personal Finance Manager with AI Categorization   **Dec 2025**
- Next.js 14 finance application with AI-powered transaction categorization using GPT-4 and Prisma ORM
- Real-time budget tracking with Recharts data visualizations and 96.7% TypeScript coverage for type safety
  - Tech Stack: Next.js 14, TypeScript, Prisma, PostgreSQL, OpenAI GPT-4, Tailwind CSS | GitHub: github.com/nwyrwas/LedgerIq