JOHN CARROLL

Based in Atlanta, GA
Open to Remote or Hybrid Work

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Professional Experience

Microsoft — *AI Global Black Belt - Senior Technology Specialist*

September 2023 - Present

Generative AI Application Development expert on the Microsoft Customer and Partner Solutions' (MCAPS) Global Black Belt team, providing technical guidance to Fortune 500 companies, driving adoption of AI solutions, and contributing to over $200M in AI-related revenue within my first year.

Leading strategic AI engagements by conducting technical deep dives, resolving blockers, developing agentic, RAG architectures, AI search optimization strategies, and deploying solutions for high-profile clients like Nvidia, Walmart, Coke, and Cisco.

Directing AI-driven application development, using technologies such as computer vision, OCR, video indexing, and building advanced AI agents to automate decision-making, optimize processes, and enhance system efficiency in dynamic and complex environments.

Creating reusable intellectual property (e.g., POCs, prototypes, solution accelerators, tools) leveraged by clients and across the organization to scale the adoption of AI, platforms, and cloud-native services.

Boeing — *Senior Software Engineer*

June 2019– September 2023

Spearheaded value stream data visualization solution focused on design and procurement processes, enhancing business intelligence and analytics for high-profile programs (EUS, SLS, ISS, PAC3, GMD). Delivered $25M in annual efficiency savings, earning Alabama's 20th STARS Award.

Headed the redesign of a 3D factory layout Unity app, optimizing UX and boosting operator efficiency, resulting in a 25% increase in conversion rates and a 15% reduction in user churn.

Implemented a root cause analysis solution for part changes in engineering processes, driving key insights through metrics, substantially reducing subsystem errors for 1,000+ daily users.

Engineered a Natural Language Processing (NLP)-based authoring tool for aircraft requirements, enhancing accuracy, efficiency, and reducing ambiguity, as part of an initiative aimed at achieving $10B in annual cost savings across the enterprise by minimizing revision cycles.

Hexagon Safety & Infrastructure — *Software Engineer*

June 2016 – July 2019

Full-stack developer for Smart Cities public safety SaaS on Azure, leveraging IoT, command-and-control (robots, drones), computer vision–powered video analytics in a service-oriented architecture, ensuring high scalability, reliability, and multi-tenancy.

Primary DevSecOps orchestrator for securing cloud resources, IaC, and configuration management. Utilized Azure DevOps CI/CD pipelines, ARM templates, and automation.

Maintained Microsoft Gold Partner standards and ISO 9001 certification.

Neptune Technology Group, Inc. — *Software Engineering Co-op*

Jan 2013 - May 2013, May 2014 - Aug 2014, Jan 2015 - May 2015

Implemented AWS SaaS metrics and dashboards, improving visibility and tracking for software product performance and customer behavior.

Developed 'pocket guide' mobile applications to enhance field personnel efficiency.

Established coding and testing standards to ensure quality and reliability.

Freelance — *Full-Stack Developer and Consultant*

Jan 2011 - Present

Over a decade of experience consulting with diverse clients, designing, developing, and hosting scalable, high-performance websites and web applications using modern technologies and cloud platforms, while ensuring seamless user experiences and consistent client satisfaction.

Education

Bachelor's of Science in Software Engineering
Auburn *University* | May 2016

Executive MBA Candidate
Quantic School of Business and Technology | Expected July 2026

Certifications

Microsoft Azure AI Engineer Associate *Dec 2024*

Neo4j Graph Data Science Certification *Nov 2024*

Skills

Core Competencies
- Generative AI, Applied AI Engineering
- Data Analytics & Visualization
- Agile, Scrum, Kanban
- Full-Stack Development, DevSecOps

Technical Expertise
- Python, C#, Java, Node.js
- JavaScript / TypeScript (Vue, React, Angular)
- Docker, Kubernetes, TensorFlow, GPU Acceleration
- Azure, AWS, GCP

Tools & Frameworks
- LangChain, PromptFlow, Semantic Kernel, AutoGen
- VSCode, GitHub, GitLab, Jira, Azure DevOps

Soft Skills
- Adaptability, Collaboration, Strategic Planning
- Communication, Empathy, Problem-Solving

Accomplishments
- Lead Developer for Microsoft AI GBB Hackathon 1st Place (2024)
- Alabama's 20th Annual STARS Award for 'Predictability and Stability' (2023)