Adrian Niles

Senior AI Solutions Architect | AI Innovation Leader

Dear All,

With 14+ years of technical development experience and 3+ years architecting production-grade GenAI solutions, I bring a proven track record of identifying emerging technologies ahead of industry adoption and translating complex AI concepts into transformative business solutions.

Pioneering AI Innovation That Industry Follows

In May 2025, I developed a Context Engineering framework to solve critical context management challenges across AI systems. This was two months before the industry standardized the methodology in July 2025. This pattern of anticipating technological shifts defines my approach to innovation. I don't just implement existing solutions. I identify what's coming next and position organizations to benefit first.

Proven Track Record Driving Measurable Impact

Through fromBRADlabs, I've architected and deployed scalable LLM-powered systems processing 9,000+ monthly interactions for 300+ production users. I work with GPT, Claude, LLaMA, Mistral, Gemini, and xAI models through sophisticated multi-model orchestration frameworks. My experience includes RAG implementations, model fine-tuning (including domain-specific applications like firefighter communication agents), and quantitative evaluation frameworks covering hallucination detection, latency analysis, and prompt quality scoring.

Production-Grade GenAI Architecture at Scale

As a member of NVIDIA Inception Program with $100,000 in AWS credits, I've deployed AI solutions using EC2, Lambda, S3, Docker, Kubernetes, and CI/CD pipelines. I've built event-driven architectures and serverless systems, including a real-time donation dashboard that increased nonprofit fundraising by 3x through gamified visualization. I understand how to build robust backend frameworks, APIs, microservices, and cloud architectures that support scalable AI workloads.

Cloud Infrastructure & DevOps Expertise

As a member of NVIDIA Inception Program with $100,000 in AWS credits, I've deployed AI solutions using EC2, Lambda, S3, Docker, Kubernetes, and CI/CD pipelines. I've built event-driven architectures and serverless systems, including a real-time donation dashboard that 3x'ed nonprofit fundraising through gamified visualization. I understand how to build robust backend frameworks, APIs, microservices, and cloud architectures to support scalable AI workloads.

Cross-Functional Leadership & Technical Communication

My experience at fromBRADlabs architecting AI solutions for diverse clients, managing teams at PawPal.ai (including offshore developers), and influencing technical direction with enterprise AI platform founders demonstrates my ability to communicate complex AI concepts clearly to non-technical audiences and build alignment across teams. I've operated successfully as both an individual technical contributor and architectural leader.

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What I Bring:

- Deep expertise across LLM architectures (GPT, Claude, LLaMA), RAG patterns, and model evaluation
- Proficiency in Python, JavaScript, Java, and AI-assisted development tools
- AWS cloud architecture experience with Docker/Kubernetes containerization
- Track record of identifying emerging technologies 2-3 months before industry adoption
- Ability to lead end-to-end AI solution design from ambiguous requirements to production deployment
- Passion for building AI systems that solve real business problems with quantifiable outcomes

Technical Background

My technical foundation began in 2012 with C++ and Arduino programming for embedded systems, leading to National Engineering Medals and 1st Place at MIT State Science Fair. At Raytheon (2014-2019), I contributed to satellite communication projects in the Space & Airborne Systems division, gaining experience with safety-critical systems and cross-disciplinary collaboration. This combination of hands-on technical development, aerospace systems thinking, and startup innovation gives me a unique perspective on building reliable, scalable AI solutions.

I would welcome the opportunity to discuss how my experience pioneering Context Engineering, driving 10x performance improvements through strategic technology integration, and architecting production GenAI systems can contribute to your organization's AI initiatives.

Thank you for considering our potential contribution. We look forward to the possibility of contributing to your continued success through Advanced AI solutions.

Sincerely,

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OBJECTIVE

Visionary AI architect with 14+ years of technical development experience and 3+ years architecting production-grade GenAI solutions. Proven track record of identifying emerging AI/ML technologies ahead of industry adoption, pioneering Context Engineering frameworks (May 2025) before industry standardization (July 2025). Expert in designing scalable LLM-powered systems, RAG implementations, and multi-model orchestration architectures. Recognized as Stack AI Developer of Excellence (2024) for driving 10x inference speed improvements through strategic Cerebras integration. Passionate about translating complex AI concepts into transformative business solutions that deliver measurable impact.

EDUCATION

2014 - 2019
BS in Management - Entrepreneurship (3 Semesters Left)
University Of Massachusetts Dartmouth

2010 - 2014
Electronics Engineering
Southeastern Regional Vocational Technical High School
- Participated in the Innovation Academy program, gaining exposure to 30 different shops/disciplines

JOB EXPERIENCES

2020 - Present
Founder
fromBRADlabs, Boston, MA

- Architected multi-LLM orchestration framework integrating GPT-4, Claude, LLaMA, Mistral, Gemini, and xAI models, pioneering specialized workflows that route tasks to optimal models based on capability strengths, achieving best-in-class output quality
- Implemented advanced RAG architectures leveraging enterprise-grade vector databases and knowledge retrieval systems, enabling contextually-aware AI responses with 95%+ accuracy for 300+ production users generating 9,000+ monthly interactions

SKILLS

AI/ML Technologies
- LLM Integration (GPT, Claude, LLaMA, Mistral, Gemini, xAI)
- RAG Implementation & Vector Databases
- Multi-Model Orchestration
- Prompt Engineering & Context Engineering
- Model Fine-Tuning & Evaluation
- Agentic Workflows & Hallucination Detection
- Model Performance Monitoring

Programming Languages
- Python (AI/ML workflows, automation)
- JavaScript and C++ (embedded systems)

Cloud & Infrastructure
- AWS (EC2, Lambda, S3, ECS, EKS)
- Docker & Kubernetes & CI/CD Pipelines
- Serverless Architectures & Microservices

Development Tools
- Airtable
- Git/GitHub
- AI-assisted development tools

Additional Skills
- 3D Printing Technologies (FDM, SLS, SLA)
- Full Product Development Cycle
- Multi-disciplinary Team Leadership
- Rapid Prototyping and Innovation
- Strategic Decision Making
- Voice-activated AI Design

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2020 - Present
Founder
fromBRADlabs, Boston, MA

- Achieved 10x inference speed improvement (300 to 3,000 tokens/second) by identifying and advocating for Cerebras integration, directly influencing enterprise AI platform's technical roadmap through strategic stakeholder engagement with platform founders
- Pioneered Context Engineering methodology (May 2025) 2 months before industry standardization, developed platform-agnostic context storage and retrieval system serving as internal operating system for cross-platform AI memory management
- Developed and deployed production AI systems on AWS infrastructure utilizing EC2, Lambda functions, S3, Docker containerization, and CI/CD pipelines for reliable, scalable deployment of LLM-powered applications
- Fine-tuned GPT models for domain-specific applications, including specialized firefighter communication agent trained on professional dialect patterns, improving user engagement by 40%
- Built quantitative evaluation frameworks implementing latency analysis, prompt quality scoring, and hallucination detection protocols to ensure model performance and reliability
- Architected real-time donation dashboard for legal nonprofit using AWS Lambda, S3, and event-driven architecture, increasing gala donations by 3x through gamified leaderboard visualization encouraging competitive giving
- Developed Python-based automation frameworks and AI-powered workflows leveraging Cursor AI agents to achieve 10-50x development productivity gains through multi-agent orchestration and self-validating systems
- Managed $100,000 AWS credits through NVIDIA Inception Program, optimizing cloud resource allocation for scalable AI workloads and infrastructure deployment
- Built AI-assisted development pipelines using specialized coding agents, establishing engineering best practices for rapid prototyping and deployment
- Executed R&D and manufacturing processes for technology products across multiple industries, serving as research and development arm for collaborative ventures

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2023 - 2025
Co-Founder & Chief Product Officer
PawPal.ai, Boston, MA

- Led development of AI companionship platform from MVP to Version 3.0, implementing AI-driven personalization engines for enhanced user experiences
- Managed cross-functional teams including offshore developers, delivering B2C and B2B SaaS products with integrated hardware solutions
- Developed B2C and B2B products, including SaaS and SaaS-enabled hardware
- Collaborated with NAACP on AI projects, including the ACT-SO LLM project
- Drove agile development methodologies for iterative, high-quality solution delivery across product lifecycle

OTHER JOB EXPERIENCES

2014 - 2019
Tech Student - Environmental Testing
Raytheon, Marlborough, MA

- Contributed to satellite communication projects
- Participated in environmental testing and R&D processes
- Gained experience in preliminary and critical design reviews
- Developed skills in cross-disciplinary collaboration and problem-solving
- Worked in 3D printing lab, learning advanced manufacturing techniques

AWARDS AND HONORS

Government Recognition

- Multiple citations from:
  ◦ U.S. House of Representatives
  ◦ Massachusetts State Senate
  ◦ Massachusetts House of Representatives
  ◦ Governor of Massachusetts
  ◦ *Past 3 Mayors of Brockton*
  ◦ Brockton City Council

AWARDS AND HONORS

Industry Recognition

- Stack AI Developer of Excellence (2024) - Awarded for pioneering Cerebras integration driving 10x inference speed improvements
- NVIDIA Inception Program Member - Selected for AI startup accelerator with $100,000 AWS credit allocation

Engineering & Innovation Awards

- ACT-SO National Gold Engineering Medal
- ACT-SO Regional Gold Engineering Medal (2013, 2014)
- ACT-SO National Silver Engineering Medal
- 1st Place MIT State Science Fair (Top 3 Scores)
- White House Maker of Merit Award
- Maker 2014 Best in Class Award
- Maker 2013 & 2014 Editors Choice Award
- Intel Computer Award
- MathWorks $7,500 Award (MIT 2014)
- NAACP Youth Outstanding Achievement Award
- American Society of Safety Engineers Award

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ACHIEVEMENTS

AI Innovation & Technical Leadership

- Invited by Will.i.am to collaborate on 3D printing projects in Los Angeles for 10 days
- Presented 'The People Move' project at the White House
- Pioneered Context Engineering framework (May 2025) before industry standardization, demonstrating ability to identify and implement emerging AI/ML techniques ahead of market adoption
- Influenced enterprise AI platform technical roadmap by connecting Cerebras infrastructure to Stack AI, resulting in Developer of Excellence recognition
- Developed platform-agnostic multi-LLM orchestration system routing tasks to optimal models (GPT, Claude, LLaMA, Mistral, Gemini, xAI)
- Built self-validating AI agent systems managing 10-50x development productivity improvements

Production AI Deployment

- Architected and deployed scalable AI applications on AWS using Lambda, EC2, S3, Docker, Kubernetes with CI/CD pipelines
- Managed 300+ production users with 9,000+ monthly AI interactions maintaining 99.9%+ uptime
- Implemented quantitative model evaluation including latency analysis, prompt quality scoring, hallucination detection
- Developed AI-driven framework for optimizing job application processes

EARLY PROJECTS

- Freshman Year: Developed illuminating coaster using multiple shop disciplines, winning consumer product competition
- High School: Created self-balancing Segway-like device using C++/Arduino programming, utilizing 7 different shops, earning National Engineering Medals and 1st Place MIT State Science Fair
- Learned CNC machine operation and part manufacturing

Technical Projects

- Implemented voice-activated design and 3D printing system using AI frameworks
- Designed and manufactured a vertical spinning ring stage setup using over 250 3D printed pieces
- Conducted 3D printing workshops for students using Formlabs printers

COMMUNITY ENGAGEMENT

- Conducted workshops showcasing Formlabs printers to students in the Brockton area
- Collaborated with NAACP on various projects, including AI initiatives
- Focused on providing access and education for professional 3D printing services

REFERENCES

Bernard Aceituno
MIT PhD | Co-Founder of Stack AI
Available upon request

CONTACT

- ☐ (508) 631-6877
- ✉ Adrian@frombradlabs.com
- 🌐 www.fromBRADlabs.com/portfolio
- ⚲ 1 Summer St, Boston, MA 02110