Adrian Niles

Senior AI Solutions Architect | AI Innovation Leader

School Committee
Southeastern Regional Vocational Technical High School
South Easton, Massachusetts
RE: Alumni AI Partnership Proposal

Dear Members of the Southeastern Regional Vocational Technical High School Committee,

My name is Adrian Niles, and I am a proud alumnus of Southeastern Regional. The skills, disciplines, and innovation mindset I developed within those walls, through the Innovation Academy and exposure to 30 different shops, became the foundation for everything I have built since. I left Southeastern with National Engineering Medals, a 1st Place finish at the MIT State Science Fair, and a White House Maker of Merit Award. More importantly, I left with the belief that hands-on, real-world problem solving is the most powerful form of education there is.

I am writing because I believe the next chapter of what Southeastern can offer its students is bigger than anything we had access to when I was there, and I want to help build it.

What I Have Built Since Graduating

Through fromBRADlabs, my Boston-based AI company, I have spent the last several years architecting and deploying enterprise-grade AI systems for clients across multiple industries. I work with the most advanced AI models available today including Chat GPT, Claude, Gemini, and others, building systems that serve 300+ production users with over 9,000 monthly interactions. I am a member of the NVIDIA Inception Program, have managed $100,000 in AWS cloud infrastructure credits, and was recognized as Stack AI's Developer of Excellence in 2024 for driving a 10x performance improvement across their platform. I also pioneered a Context Engineering methodology in May 2025, two months before the industry standardized the approach.

I share this not to impress the committee, but to show what is possible when a student from Southeastern is given the tools and the environment to build.

What I Want to Bring Back

I have developed a direct relationship with Stack AI, an enterprise-grade AI platform with specialized guardrails built for safe, controlled deployment. This is not consumer AI. This is the same caliber of AI infrastructure that large organizations and institutions use, with the ability to control exactly what the system can and cannot do.

My vision for Southeastern is this: staff with access to their own AI tools to reduce administrative workload and support lesson planning. Individual vocational shops with their own specialized AI agents tailored to their discipline, whether that is electronics, automotive, culinary, or any of the other programs. Students with access to guided AI tools that support their learning within a safe, school-controlled environment. And yes, even a school mascot agent that students can interact with, that represents the Southeastern identity in a way that is fun, engaging, and uniquely theirs.

All of this can be built in a safe, monitored environment through the platform I already have access to. I am not coming to the committee with a proposal that requires a large budget or outside vendors. I am coming as an alumnus who built real enterprise AI connections and wants to put them to work for the students who are walking the same halls I walked.

I would love the opportunity to present this vision to the committee directly and show you what this could look like in practice. Southeastern gave me the start I needed. I would like to give something back that lasts.

Thank you for your time and for everything this school continues to give to its students.

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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 (Claude, Mistral, Gemini, xAI)
- RAG Implementation & Vector Databases
- Multi-Model Orchestration & Agentic Workflows
- AWS Bedrock & Multi-Agent Frameworks
- Prompt Engineering & Context Engineering
- Model Fine-Tuning & Evaluation
- Agentic Workflows & Hallucination Detection
- Model Performance Monitoring

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

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

Development Tools
- Git/GitHub & GitHub Actions
- 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

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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

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