Ajay Sieunarine

Senior Software Developer & Team Lead

📱 *(868) 751-0482*
✉ *ajay_sieunarine@hotmail.com*
🌐 *www.ajaysieunarine.com*
in *ajay-sieunarine-1a9b1b174*
🐙 *jefroy*
Google Cloud Platform Certified Architect | NVIDIA AI Certified

Professional Summary

Senior Software Developer and Team Lead with 4+ years experience building and managing production data systems. Currently leading UN-funded agricultural trading platform development using modern technologies (NextJS, TypeScript, Supabase). Google Cloud Platform certified architect with NVIDIA AI certifications and MSc Data Science background. Proven expertise in team management, enterprise system architecture, FinTech platforms, and intelligent data processing pipelines.

Education

2023–2025 **Master of Science in Data Science**, *University of the West Indies*, Trinidad and Tobago, *Final Year*

Thesis completion target: 2025 with publication goal. Research focus: Agriculture data analytics and intelligent systems applications using NAMDEVCO datasets. Relevant coursework: Machine Learning, Natural Language Processing, Statistical Analysis, Data Engineering, AI System Architecture.

2016–2020 **Bachelor of Science in Computer Science (Special) with Honors**, *University of the West Indies*, Trinidad and Tobago, *Honors*

Strong theoretical foundation in computer science, algorithms, data structures, and software engineering principles.

Professional Experience

Current Position

Sep 2024–Present **Senior Software Developer**, *Public Good Studio (PGS)*, Trinidad and Tobago

Leading web development for enterprise projects with international partnerships. Currently the sole remaining developer following organizational restructuring.

Key Responsibilities & Achievements:

- **AgriConnect Lead Web Developer:** Managing complete web platform development for UNCDF-funded, UN-backed agricultural trading platform, handling all frontend and backend implementation
- **Full-Stack Platform Ownership:** Independently developing and maintaining web architecture using modern technologies (NextJS, TypeScript, Supabase, Drizzle ORM)
- **Shamrock HSE Lead Developer:** Independently developing comprehensive greenhouse gas emissions monitoring platform with complex environmental calculation engines
- **Payment System Implementation:** Designed and implemented complete Stripe subscription management system with complex billing logic and automated payment processing
- **Technical Stakeholder Interface:** Maintaining technical delivery commitments while project leadership handles government partnerships (TTIFC, NAMDEVCO)
- **System Reliability:** Ensuring continued platform operation and development during company transition period

Previous Positions

Oct 2023–Sep 2024 **Software Developer (Part-Time)**, *Intelligent Applications Company Limited*, Trinidad and Tobago (Remote)
Concurrent development role while completing MSc coursework.
Key Responsibilities:
- ○ **Security Expertise:** Conducted penetration testing and vulnerability assessments for client applications and Azure deployments
- ○ **Multi-Client Support:** Maintained diverse client codebases including Caribbean Sailing Association platform, Pennywise label printer software, and cargo manifest applications
- ○ **Azure Security:** Performed security audits and hardening of Azure-deployed applications, providing detailed reports and implementing fixes
- ○ **Client Consultation:** Collaborated directly with clients on technical requirements, security improvements, and system maintenance

Nov 2022–May 2023 **Full Stack Developer**, *HR Plus Software*, Trinidad and Tobago
Enterprise application development using modern web technologies.
Key Contributions:
- ○ Collaborated with dynamic team to develop and redesign new systems using .NET 6, MySQL, and Telerik UI
- ○ Built responsive user interfaces using Razor Pages, JavaScript, CSS, and Telerik UI components
- ○ Applied SCRUM methodology and collaborated with developers to implement new features iteratively
- ○ Gained expertise in enterprise web application development and database optimization

Jan 2022–Nov 2022 **Technical Analyst (Intern)**, *Republic Bank Limited*, Trinidad and Tobago
Production support in regulated banking environment.
Key Achievements:
- ○ **Automation Success:** Developed PowerShell automation solutions achieving 10% improvement in team efficiency with measurable time and cost savings
- ○ **Full-Stack Development:** Built comprehensive Ticketing System digitizing existing manual processes as full-stack web application
- ○ **Database Management:** Configured and maintained test environments and databases supporting programming department operations
- ○ **System Monitoring:** Performed routine maintenance checks ensuring system health in mission-critical banking infrastructure

Aug 2020–Nov 2021 **Full Stack Developer**, *Adult Literacy Tutors Association*, Trinidad and Tobago
Educational platform development and maintenance.
Responsibilities:
- ○ Maintained existing codebase, implemented bug fixes, and developed new features
- ○ Applied modern web technologies: Git, PHP, JavaScript, CSS, ReactJS, unit testing
- ○ Contributed to code quality through systematic testing and collaborative review processes

Aug 2018–May 2019 **Software Developer Intern**, *Trinidad and Tobago Meteorological Office*, Trinidad and Tobago
Government system development internship.
Key Projects:
- ○ **Climate Report Management System:** Collaborated with team to design and develop system enhancing workflow for staff and administrators
- ○ **Security Implementation:** Designed, tested, and integrated Access Control List (ACL) for secure user authentication
- ○ **Agile Practices:** Utilized SCRUM methodology and applied CI/CD practices during development lifecycle
- ○ Gained experience in PHP/Laravel, Vue.js, leadership and teamwork skills

Key Projects

Sep 2024–Present	**AgriConnect - UN-Funded Agricultural Trading Platform**, *UNCDF Partnership*, NextJS, TypeScript, Supabase
	Platform modernizing Caribbean agricultural trade through FinTech solutions, connecting farmers with commercial buyers across the region while supporting government digitization initiatives with TTIFC and NAMDEVCO.
Sep 2024–Present	**Shamrock HSE - Environmental Management Platform**, *Enterprise Client*, NextJS, TypeScript, Stripe
	Comprehensive greenhouse gas emissions monitoring and carbon footprint tracking platform featuring sophisticated calculation engines and complete subscription management system.
Ongoing	**Professional Portfolio Applications**, *Personal Leadership*, Various Technologies
	Lead Developer and Project Manager for CinemaTT movie discovery platform (cinematt.net) and PlaylistGuru social music curation application (playlistguru.app), demonstrating algorithm development and consumer-facing application expertise.
Ongoing	**Infrastructure Homelab Laboratory**, *Personal Learning*, Docker, Linux, Networking
	Comprehensive self-hosted infrastructure supporting multiple containerized applications with automated deployment pipelines, providing hands-on experience with container orchestration and system administration essential for production deployments.

Technical Skills

Programming Languages	Python, TypeScript, JavaScript, C#, PHP, Java, C/C++, PowerShell, SQL, MiniZinc
Modern Web Development	NextJS, React, Vue.js, Supabase, Drizzle ORM, Node.js, Express.js
Backend Frameworks	Flask, Django, .NET 6, Laravel, ASP.NET
Databases	PostgreSQL, MSSQL, MongoDB, MySQL, Firebase
AI/ML & Data Science	RAG Systems, Vector Databases (ChromaDB, FAISS), CUDA Python, Machine Learning, Natural Language Processing, Data Pipeline Development, Statistical Analysis
Cloud Platforms	Google Cloud Platform (Certified Architect), Microsoft Azure, AWS Services
Infrastructure & DevOps	Docker, Container Orchestration, Linux System Administration, CI/CD, System Architecture, Networking
Security	Penetration Testing, Vulnerability Assessment, Security Auditing, Enterprise System Hardening
Payment & FinTech	Stripe Integration, Subscription Management, Digital Payment Systems
Development Tools	Git, SCRUM/Agile, Jupyter Lab, Android Studio, Unity, Docker, XAMPP

Certifications & Professional Development

2025	**NVIDIA Deep Learning Institute**, *Fundamentals of Accelerated Data Science*
2025	**NVIDIA Deep Learning Institute**, *Fundamentals of Accelerated Computing with CUDA Python*
2024–2026	**Google Cloud Platform**, *Professional Cloud Architect Certification*
In Progress	**NVIDIA Deep Learning Institute**, *RAG Systems Certification*
2019	**Microsoft Office Specialist**, *Excel 2016 & Word 2016*

Languages

English	Native	*Professional working proficiency*

Professional Development & Specializations

AI/ML Applications	Retrieval-Augmented Generation systems, Vector databases, Natural Language Processing, Predictive modeling for agricultural data
Cloud Architecture	Enterprise system design, Infrastructure as Code, Container orchestration, Production deployment strategies
FinTech Development	Payment system integration, Financial inclusion platforms, Digital transformation solutions, Subscription-based business models
Security Expertise	Application security assessment, Vulnerability remediation, Enterprise system hardening, Compliance in regulated environments
Team Leadership	Developer mentoring, Technical project management, Cross-functional collaboration, Stakeholder communication

Community Service & Leadership

Professional Mentoring	Ongoing guidance and support for junior developers and computer science students entering the technology industry
Student Leadership	SFAS (Sixth Formers Association) leadership positions (2016-2017), focusing on community service and student development initiatives
Continuous Learning	Regular participation in technology conferences, professional development workshops, and emerging technology research

Notable Achievements

- Successfully maintaining critical UN-funded agricultural trading platform as sole remaining developer during organizational transition, ensuring continued service to Caribbean farmers and commercial buyers
- Achieved quantifiable 10% efficiency improvement through PowerShell automation in regulated banking environment, delivering measurable cost savings
- Earned Google Cloud Professional Architect certification while maintaining full-time senior development responsibilities
- Completed multiple NVIDIA Deep Learning Institute certifications demonstrating commitment to AI/ML skill development
- Currently managing MSc Data Science thesis research with large-scale agricultural datasets while maintaining senior technical role

References

Professional References

Available upon request

- Current and former supervisors from enterprise roles
- Technical colleagues and project collaborators
- Government partners from AgriConnect initiative

Academic References

Available upon request

- MSc Data Science faculty supervisors
- University research collaborators
- Academic mentors and advisors