

Senior Software Engineer, AEX (Agentic Experiences) @ MTA Cork

Position Overview

The Senior Software Engineer is a key technical contributor responsible for designing, building, and maintaining AI agents and agentic experiences for business use cases using Marriott's AI Platform. This role focuses on delivering high-quality, production-grade AI agent solutions that integrate seamlessly with business systems and workflows.

This role requires deep technical expertise in AI/ML development, strong problem-solving skills, and the ability to work independently while collaborating effectively with cross-functional teams including business stakeholders. The ideal candidate is a self-directed engineer who can take ownership of complex agent implementations and drive them to completion.

Key Responsibilities

- Design and implement AI agents and agentic workflows that solve business problems and integrate with existing systems.
- Write clean, maintainable, well-tested code following engineering best practices and coding standards.
- Collaborate with product managers, business stakeholders, and other engineers to understand requirements and deliver solutions.
- Participate in architecture discussions and contribute to technical design decisions for agent implementations.
- Own agent features end-to-end, from design through implementation, testing, deployment, and monitoring.
- Integrate AI agents with business systems, databases, APIs, and other enterprise services.
- Debug and resolve production issues, ensuring agent reliability and performance.
- Conduct code reviews and provide constructive feedback to peers.
- Contribute to technical documentation, design docs, and runbooks for agent implementations.
- Mentor junior engineers and contribute to team knowledge sharing.
- Identify and address technical debt and opportunities for improvement.
- Stay current with industry trends and best practices in AI agent development.

Required Qualifications

- Proven record of delivering full stack software at scale (1m+ users).

- Experience building AI/ML applications, LLM integrations, or AI agent systems.
- Experience integrating LLMs and AI capabilities into production applications.
- Experience bringing at least one application from design to production. (Full SDLC experience)
- Strong proficiency in Python, TypeScript, or JavaScript.
- Strong understanding of software architecture, design patterns, and best practices.
- Experience with REST APIs, GraphQL, or other API technologies for system integration.
- Familiarity with cloud platforms (AWS, Azure, or GCP) and cloud services.
- Experience with modern devops concepts: CI/CD pipelines, kubernetes and provisioning of cloud services.
- Strong problem-solving skills and ability to debug complex issues.
- Excellent written and verbal communication skills.
- Ability to work independently and take ownership of deliverables.
- Experience writing unit tests, integration tests, and maintaining test coverage.
- Understanding of business processes and ability to translate requirements into technical solutions.
- Experience with observability tools (OTEL, logging, RUM) and production user monitoring & debugging.

Preferred Qualifications

- Experience with observability tools and monitoring AI agent performance.
- Experience building production AI agents or agentic systems for enterprise use.
- Background in conversational AI, chatbots, or virtual assistants.
- Experience with agent frameworks (LangChain, AutoGPT, CrewAI, etc.).
- Familiarity with RAG (Retrieval Augmented Generation) and vector databases.
- Experience integrating with enterprise systems (CRM, ERP, databases, APIs).
- Knowledge of prompt engineering and LLM optimization techniques.
- Experience with event-driven architectures and message queues.
- Knowledge of security best practices for AI applications.
- Prior experience working with business stakeholders to deliver AI solutions.

Why This Role Matters

Senior Software Engineers are the backbone of the build squad, responsible for turning business requirements into working AI agent solutions. This role offers the opportunity to build agentic experiences that directly impact business outcomes and user experiences. You will also be able to mentor and learn from other engineers. This role sits on the

emergingtech team, we strive to push ourselves to do things the best way possible with the latest technology available. If you want to work on challenging technical problems while building AI solutions that matter to real users, this role provides the technical depth and business impact you're looking for.