Senior Software AI Engineer - Fullstack

HEJ higheredjobs.com/search/details.cfm

Southern New Hampshire University is a team of innovators. World changers. Individuals who believe in progress with purpose. Since 1932, our people-centered strategy has defined us - and helped us grow a team that now serves over 180,000 learners worldwide.

Our mission to transform lives is made possible by talented people who bring diverse industry experience, backgrounds and skills to the university. And today, we're ready to expand our reach. All we need is you.

Make an impact - from near or far

At SNHU, you'll have the option to work remotely in the following states: Alabama, Arizona, Arkansas, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Nebraska, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin and Wyoming.

We ask that our remote employees have access to a reliable internet connection and a dedicated, properly equipped workspace that is free of distractions. Employees must reside in, and work from, one of the above approved states.

The opportunity

Southern New Hampshire University (SNHU) is looking for an experienced Senior AI Engineer, Platform (full stack). You will report directly to the Vice President of AI Engineering. Your responsibilities will include engineering the backend systems that power our agentic AI learning platform. This will involve designing agent orchestration, which includes planning, memory, and tools. Additionally, you will shape the evaluation strategy for LLMs and agents, empowering human-centered learning for the age of AI.

You're backend-first but product-minded: when needed, you'll also ship lightweight web (and potentially mobile) changes to deliver end-to-end slices without being the UI specialist.

You will also help build the foundations for production readiness (observability, safe deployments, performance/cost hygiene) and help us evolve toward sustainable on-call operations as usage grows.

You will work remotely from any of our approved States #LI-Remote

What you'll do:

Agentic backend and platform (primary)

- You will design and implement scalable APIs/services for developing AI agents, including orchestration, memory, tool use, and learner interaction
- You will implement rigorous evaluation frameworks to improve agent performance (offline and in-product), and build the instrumentation to make results actionable improvement cycles
- You will build data flows/pipelines that allow real-time personalization and learning insights
- You will ensure data quality and accessibility for training and evaluating learning agents
- You will improve developer velocity with solid API design, testing practices, and realistic architecture choices
- This is a remote position

Full-stack product delivery (meaningful, but not "frontend lead")

- You will ship end-to-end product slices: implement backend capabilities and the corresponding lightweight web UI (and occasionally mobile) to unblock product progress
- You will build lightweight internal tools/admin surfaces for evaluation, debugging, content/ops workflows, and product iteration
- You will collaborate with product/design to deliver high-quality user experiences while keeping scope and maintainability sane

Site reliability foundations

- You will help establish the basics of production readiness: monitoring, dashboards, logging/tracing, and performance/cost hygiene
- You will contribute to automated testing and deployment pipelines for rapid, safe iteration (CI/CD, rollbacks, environment hygiene)
- You will participate in incident response when needed and help shape runbooks, postmortems, and an on-call model appropriate for our current stage

What we're looking for:

- 5+ years production Python experience at scale (or equivalent)
- AWS expertise (Lambda, S3, and CloudWatch)
- Familiarity with compound systems combining LLMs, ML, and traditional software components
- Experience with agentic AI architectures (e.g., CrewAI, LangGraph/LangChain, AutoGen, LlamaIndex, MCP, A2A, ACP, DSPy, or custom frameworks)
- Hands-on experience with evaluation methodologies for LLMs and agent-based AI systems
- Infrastructure as Code experience (CDK, Terraform, or similar)
- GitHub Actions or similar CI/CD platforms
- Experience communicating updates and resolutions to customers and other partners)

- Comfortable working across the stack when needed. Read and write TypeScript, and ship small UI features using React/Next.js or similar technologies. Additionally, the ability to contribute occasional mobile changes in iOS/Swift and Android/Kotlin.
- Experience building production readiness / SRE foundations (instrumentation/observability basics, safe deployments, performance/cost hygiene)

AI-Augmented Development:

- Active user of AI development tools (GitHub Copilot, Cursor, Claude Code, Codex) with personal projects and evolution over the past 12 months
- Demonstrated examples of AI-augmented productivity gains
- Enthusiasm for pushing boundaries of AI-assisted engineering
- Experience with a relational database such as MySQL, PostgreSQL, or Oracle

We believe real innovation comes from inclusion - where different experiences, perspectives and talents are celebrated. So if you're wondering whether SNHU is right for you, take the leap and apply. You might be just the person we're looking for.

Compensation

The annual pay range for this position is $113,908.00 - $182,287.00. Actual offer will be based on skills, qualifications, experience and internal equity, in addition to relevant business considerations. We expect this position to be hired in the following target hiring range $125,868.00 - $170,293.00.

Exceptional benefits (because you're exceptional)

You're the whole package. Your benefits should be, too. As a full-time employee at SNHU, you'll get:

- High-quality, low-deductible medical insurance
- Low to no-cost dental and vision plans
- 5 weeks of paid time off (plus almost a dozen paid holidays)
- Employer-funded retirement
- Free tuition program
- Parental leave
- Mental health and wellbeing resources