

HAYDEN CHRISTOPHER EUBANKS

Software Engineer · AI Systems & Agentic Architecture

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PROFESSIONAL SUMMARY

Software Engineer specialising in production-grade agentic AI systems, currently building LLM pipelines, multi-agent fraud detection infrastructure, and high-throughput microservices at Lloyds Banking Group. Brings a rare combination of regulated enterprise engineering and hands-on AI research with personal projects spanning agentic workflows, RAG architectures, semantic retrieval systems, and services across the tech stack. Equally comfortable reasoning about system design at scale and shipping working software in production.

EXPERIENCE

Software Engineer — Economic Crime Prevention | Lloyds Banking Group *July 2025 - Present*

- ▶ Building and managing over 15 microservices processing more than 10 million transactions per day in a regulated banking environment
- ▶ Designing and deploying agentic AI solutions on GCP for financial crime detection
- ▶ Architecting multi-agent orchestration pipelines processing real-time transaction data
- ▶ Integrating LLM-driven toolchains with internal APIs, databases, and monitoring systems
- ▶ Managing cloud infrastructure at scale with Terraform, Kubernetes, and Harness CI/CD

Quality Engineer | Lloyds Banking Group *October 2023 - July 2025*

- ▶ Reduced regression suite runtime by ~70% through framework refactoring and parallelisation
- ▶ Designed and built BDD automation coverage across 5 microservices, shifting testing left
- ▶ Established CI-integrated testing standards adopted across the engineering team
- ▶ Recognised as TECA Outstanding Team Award finalist for the Inbound Payments Screening Team

PROJECTS

AI Research Assistant - Agentic Knowledge Graph Pipeline - <https://airesearchassistant-8gfu.onrender.com/>

Solves the challenge of keeping up with the explosion of AI research automatically curating, connecting, and summarising papers so engineers can stay current without manual triage.

- ▶ Agentic pipeline ingesting, indexing, and surfacing AI research through knowledge graph connections — ~400 papers daily with Qdrant RAG retrieval and auto-generated weekly two-host podcast
- ▶ Architecture: SequentialAgent orchestrator (Google ADK) coordinating 5 specialised agents — Ingestion, Analysis, Knowledge Graph Construction, Signal Detection, Report Generation
- ▶ Tech: Python · FastAPI · Google ADK · Gemini · Kuzu Graph DB · Qdrant · OpenAI TTS HD · Cloudflare R2

AutoArchitect - Multi-Agent Architecture Design Tool - <https://autoarchitect.onrender.com/>

Removes the bottleneck between a project idea and a structured technical spec giving any developer documentation in minutes rather than days.

- ▶ Translates natural language project descriptions into production-ready technical documentation via a 6-agent pipeline generating C4 models, architecture diagrams, and cloud cost estimates
- ▶ Tech: Python · Flask · Google ADK · Gemini 2.0 Flash · Mermaid.js

AI Code Reviewer - Semantic Code Review System

Addresses the shortage of senior review capacity on engineering teams delivering experienced, pattern-matched feedback on any code submission without requiring a reviewer in the loop.

- Automated code review system delivering contextual, PR-style feedback using semantic similarity search over real-world GitHub PR data embedded in Qdrant
- Tech: Java · Quarkus · Qdrant · OpenAI GPT-4o · Docker

CoLab - Real-Time Collaboration Platform - <https://colabchat.co.uk/>

Real time messaging and productivity application. Contains real time chat functionality with more functionality to come.

- Full-stack platform with real-time messaging over WebSockets, persistent chat history, and cross-platform responsive UI built for low-latency communication at scale
- Tech: React · Java Spring Boot · MySQL · WebSockets

TECHNICAL SKILLS

Primary Languages	Java · Python · JavaScript · SQL
Frameworks	Spring Boot · Flask · Quarkus · Google ADK
AI / ML	Multi-Agent Orchestration · RAG Architecture · Vector Databases · Knowledge Graphs · Prompt Engineering · Semantic Retrieval
Cloud & DevOps	Google Cloud Platform · Kubernetes · Terraform · Harness CI/CD · Jenkins · Istio · Docker
Full Stack	REST API Design · Database Design · WebSocket Systems · Cybersecurity · Front End Design
Testing & QE	Agent Evaluations · BDD Automation · CI-Integrated Testing · Performance Testing · Microservices Testing

EDUCATION & CERTIFICATIONS

BSc Computer Science (Cybersecurity) · Liberty University 2023 · GPA 3.79 (*First-Class Equivalent*)

ISTQB Certified Tester - Foundation Level

November 2023

AWARDS & RECOGNITION

[Winner] Reboot Hackathon · Lloyds Banking Group, 2025

Built a banking app UX for young people's financial & mental wellbeing — sponsored by Microsoft Azure, Publicis Sapient, and IBM.

[Finalist] TECA Outstanding Team · Tackling Economic Crime Awards, 2024

Inbound Payments Screening Team recognised for combating economic crime through innovation.