

Jordan Docherty

Bay Area, CA | US Permanent Resident

Engineering leader heading Applied AI R&D at American Express's Bay Area lab. I build agentic AI systems, advise Amex Ventures on early-stage diligence, and translate research partnerships into product, with bias for action. Background in payments infrastructure and high-reliability distributed systems.



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TECHNOLOGY: Python, Kotlin, Java, Agentic AI, LangChain, LangGraph, microservices, event-driven architecture, API design, AWS, Kubernetes, Kafka, Redis

LEADERSHIP: Hiring specialized teams, organizational design, performance management, technical strategy, cross-org alignment, mentorship, stakeholder management

WORKFLOW: WisprFlow, Claude Code, Claude Design, Codex, personal knowledge graph (Karpathy-inspired), CodeRabbit

Experience

2024 - present

American Express
Bay Area

Staff Engineer, Applied AI R&D

- Started American Express's Applied AI R&D team in the Bay Area at the request of the CTO; relocated Florida → Bay Area in 2025.
- Lead a 5-person team of senior engineers building production agent systems — long-horizon tasks, agent swarms, context engineering, and RAG — with a particular focus on mainframe and legacy code modernization, where deterministic AST-driven transformations and agentic reasoning have to work together.
- Contribute to research partnerships with Stanford (digital twins) and MIT (legacy modernization) through company-sponsored research tokens, translating findings back into shippable patterns and internal whitepapers.
- **Operational AI:** embedded with a partner team to bring agent-driven automation into their day-to-day enterprise workflows, where reliability and audit constraints matter as much as the model.
- Drove early enterprise adoption of coding agents in 2024, including harness design, evaluation tooling, and operational guardrails.
- Advise Amex Ventures on early-stage technical diligence for AI and frontier-tech startups, with diligence outcomes informing investments (e.g., Replit).
- Authored an internal whitepaper on post-quantum cryptography and cryptographic agility, in partnership with a quantum cryptography startup.
- Speaker at internal technical events on the future of the SDLC; reverse-mentor senior leadership on agentic AI.

2019 - 2024

American Express
Florida

Staff Engineer / Senior Engineering Manager, Payments Platform

- Relocated UK → Florida in 2019 to lead autopay across the global Payments Platform, first as Senior Engineering Manager, then as Staff Engineer / Architect.
- Led an 8-engineer platform team and served as architect across a 70+ engineer organization processing over \$1T annually, designing shareable payments infrastructure (scheduling, clearing) under strict latency, reliability, and regulatory constraints.
- Redesigned the architecture onto a greenfield "Modern Payments" platform via domain-driven design, delivering high-throughput, idempotent systems for autopay and clearing.

- Led modernization of legacy mainframe and Java systems into Kotlin microservices on Kubernetes / Open-Shift, with event-driven workflows on Kafka and guaranteed delivery via Temporal.
- Built the API governance function from scratch — design standards, contract-first workflows, Stoplight Spectral linting — used across partner-facing and internal teams.
- Mentored senior engineers, tech leads, and engineering managers; set engineering standards and delivery practices across the org.

2018 – 2019

American Express
UK

Senior Engineer, Payments

- Joined the UK money movement engineering organization as a senior engineer on the payments platform; worked across the legacy estate and the early modernization wave that followed me to the US.

2016 – 2017

DriverNet
UK

Lead Software Engineer

- Lead engineer at an early-stage logistics / transportation startup; full-stack across native mobile, backend services, and infrastructure.
- Architected and delivered the platform end-to-end; ran successful production trials with operator partners and helped secure UK government innovation funding.

Education

2016 – 2017

MSc Advanced Computer Science — University of Manchester, UK

2013 – 2016

BSc Computer Science, First Class Honours — University of Salford, UK

Open Source

2026

agentchecklist.io

Agent Checklist

- A 12-principle manifesto for building durable, inspectable, and safe-to-evolve agents — identity, versioning, harnesses, evals, guardrails, budgets, traceability, override.

2026

github.com/dchrty/glimpsh

glimpsh

- Webcam gaze tracking + voice transcription to drive multi-pane terminal AI coding agents (Claude Code, Codex CLI) hands-free. Pluggable websocket protocol for gaze backends.

Personal Lab

ongoing

NVIDIA DGX Spark for local model prototyping. OpenClaw self-hosted on a Minisforum mini-PC as an always-on personal agent. Hugging Face Reachy Mini for embodied-AI experiments. Hand-built split ergonomic keyboards (Corne, Lily58) with custom firmware.