Michael R. Pointer

Forward-Deployed Engineer | Agentic and Voice AI | CCaaS
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PROFESSIONAL SUMMARY

AI Solutions Architect and Forward-Deployed Engineer with 12+ years building and selling enterprise AI at IBM Watson, Deloitte, Talkdesk, Observe.AI. Writes the Python (LangChain, FastAPI, AWS Lambda, spaCy) and writes the SOW. Closed $30M+ in AI ACV at Talkdesk at 135% attainment over 10 straight quarters. Co-architect of the ADR (AI Exception Detection and Resolution) framework, and now a Forward-Deployed Engineer at Genesys, building and tuning agentic virtual agents in customer production environments. AWS Certified Solutions Architect. MS Physics, University of Pittsburgh.

CORE COMPETENCIES

Generative & Agentic AI: OpenAI, Anthropic Claude, Google Gemini; LangChain, LlamaIndex; agentic frameworks (LAM, virtual agent, copilot patterns); LLM fine-tuning; RAG architectures with guardrails, evaluation harnesses, and governance.

Enterprise AI Architecture: Real-time streaming inference pipelines, MLOps, microservices, API integration, vector search, cloud cost optimization, hallucination mitigation, evaluation and observability.

Programming & Frameworks: Python (primary), Node.js, TypeScript, Java; PyTorch, TensorFlow, spaCy; FastAPI; AWS Lambda; Google Cloud Functions; React with Vite, Tailwind.

AWS & Cloud: AWS (Certified Solutions Architect, Associate): Bedrock, Connect, Amazon Q in Connect, Lambda, CloudWatch, SageMaker, CI/CD (CodePipeline, Spinnaker); Azure, GCP, IBM Cloud; Kubernetes, Docker, serverless; Vercel, Railway; Google Vertex AI.

Contact Center AI: Genesys Cloud CX and Agentic Virtual Agent (AVA), Talkdesk, Amazon Connect, Five9, Google CCAI; agentic virtual agents, agent copilot and assist, auto QA, voice AI, real-time conversation analytics.

Customer-Facing & Delivery: Technical discovery and requirements capture, POC and prototype delivery, RFP response, automation design, use-case validation against KPIs, ROI modeling, project delivery, mentoring and enablement.

SELECTED TECHNICAL PROJECTS

ProjectFlow AI projectflow-ai.vercel.app • github.com/mpointer/ProjectFlowAI
Architect and Full-Stack Developer, AI Document Processing and Project Management Platform

- Architected and built an end-to-end AI platform for document processing and enterprise project management: a FastAPI and LangChain RAG backend, a React 18 with TypeScript and Vite front end, and a recursive organization, customer, project, and task data model with compliance, procurement, and approval workflows.
- Designed the ingestion pipeline. Multi-engine OCR (Tesseract, EasyOCR) and table extraction (Camelot, Tabula, PDFPlumber) feed sentence-transformer embeddings and pgvector similarity search behind RAG natural-language querying.
- Built an interactive D3.js force-directed knowledge graph, GPT-4 project auditing, and health and risk analytics over a 27-table PostgreSQL schema.
- Shipped to production on Vercel and Railway (PostgreSQL and Redis), containerized with Docker and automated through GitHub CI/CD.

Future Me, Answered futuremeanswered.com
Solo Architect and Full-Stack Developer, AI Career-Discovery SaaS

- Architected and shipped a production multi-tenant SaaS that walks high-school students through a five-stage career-discovery journey (Discover, Explore, Compare, Test, Decide). Built on Next.js 16 (App Router, Turbopack) and TypeScript in strict mode, with 90+ API routes and a 35+ table Turso and libSQL schema on Drizzle ORM.
- Built a multi-provider LLM layer (Vercel AI SDK over Google Gemini, OpenAI, Anthropic, AWS Bedrock, and watsonx) with admin-configurable primary and fallback routing, response caching, and rate limiting on Upstash Redis.
- Built the suggestion engine on 922 O*NET career embeddings enriched with BLS salary data and College Scorecard outcomes. It produces weighted decision matrices, ROI calculations, automation-resilience scores, and skills-gap analysis.
- Handled production security and operations: AES-256-GCM PII field encryption, PII sanitization of AI prompts, bot protection, Stripe billing, 13-language localization with RTL, Sentry, and a test suite of 553+ Vitest, 86 Playwright, and k6 load tests.

PROFESSIONAL EXPERIENCE

Genesys (Remote) Feb 2026 to Present

Forward-Deployed Engineer, AI Mission Control (Nov 2026 to Present)

- Build, test, and tune Genesys Agentic Virtual Agents (AVA) inside customer orgs and carry them from workshop build through pilot and go-live.
- Built a voice AVA that routes vehicle-protection claims calls for a global insurer: contract lookup by VIN against the customer's own contract data, routing to about nine intent queues or third-party vendors, and guardrails that keep the AVA from stating a coverage decision. Set pilot KPIs with the customer: first-call routing accuracy, intent recognition, and deflection.
- Took a government-services customer's voice AVA toward production: restored secure caller verification, added email normalization before identity lookup, and handed over the build, test results, and a SIP capture runbook.
- Traced voice AVA callers being cut off mid-sentence to end-of-speech detection splitting one turn into several; showed prompt changes only partly helped (3 of 4 test calls passing) and took a timeout fix to AVA engineering.

Senior AI Architect, Sales (Feb 2026 to Oct 2026)

- Lead pre-sales architecture for the Genesys CCaaS AI portfolio (Agentic Virtual Agent, Agent Copilot, Predictive AI, Generative AI) and turn Fortune 500 business problems into deployable solution blueprints, from discovery through implementation and optimization.
- Ran 12 AXL (Agentic Experience Lab) workshops where customer teams leave a 2 to 4 hour session with a working AVA, built with spec-driven design in Cursor and the Genesys AVA skills toolkit. Customers spanned banking, insurance, healthcare, life sciences, and e-commerce.
- Rebuilt and shipped the AVA front-door intent classifier (v3.1): it pulls intents from the Genesys Intent feature, imports them through the API, and asks a clarifying question when intent is unclear.
- Built three spec-driven design (SDD) skills: live AVA audio testing, custom Journey Management demos, and running a Journey Management version of the AXL workshop.
- Advise enterprise customers on agentic, generative, and predictive AI adoption, and feed customer-engagement insights into the Genesys AI roadmap. Build best practices, documentation, and adoption training for partner and field teams.

AWS Professional Services, via OxfordCorp (Remote) Dec 2025 to Feb 2026

Senior Sales and Solution Engineer (Contract)

- Architected an Amazon Q-driven agentic travel voice agent for Vrbo and Expedia on the AWS Professional Services delivery team.
- Wrote AWS Lambda functions in Python and built Amazon Connect flows for deterministic conversational paths and agent tool integration, with monitoring and alerting in Amazon CloudWatch.
- Built an AWS Bedrock agent simulator that let the team iterate quickly on JIRA-reported issues during QC cycles.
- Wrote and approved PRs in GitHub Enterprise; rolled out AWS infrastructure through a CI/CD pipeline and Spinnaker.

Innova Solutions (Remote) Nov 2025 to Dec 2025

Architect and Principal Consultant, ADR Framework (Contract)

- Co-architected ADR (AI Exception Detection and Resolution), a domain-specialized agentic AI framework for back-office exception handling in Finance, Healthcare, and Insurance. Built on LangChain and Python with explicit guardrails, reasoning traces, and human-in-the-loop action gates.
- Designed the lifecycle pipeline: event-stream exception detection, AI reasoning, resolution strategy, then human or API action.
- Integrated with CCaaS, CRM, ERP, and RPA systems through reusable workflows and toolsets.
- Built ROI models showing a large drop in manual exception-handling time under hybrid agentic AI.

Observe.AI (Remote) Nov 2024 to Nov 2025

Senior Sales Engineer, Account Management

- Closed about $1M in new ARR in 12 months. Delivered 10 production POCs across Auto QA, agent assist, and outbound voice agents on Genesys Cloud CX, Amazon Connect, Five9, Salesforce, and ServiceNow, each one proving KPI lift before procurement.
- Built reusable CCaaS and CRM integrations and ran cross-functional agentic AI POCs that combined inbound and outbound automation with n8n workflows.
- Built agentic AI demos on OpenAI GPT-4o, Anthropic Claude, and Google Gemini, with ROI validation tied to customer KPIs.

Talkdesk (Remote) Jan 2022 to Oct 2024
Senior AI Strategic Sales Leader

- Drove $30M+ in AI annual contract value as technical sales lead on CCaaS and AI modernization, at 135% attainment across 10 straight quarters. Built the AI maturity model, the sales-engineering training curriculum, and the reusable solution frameworks the team still runs from.
- Architected AI overlay strategies across geographies and industries and positioned Talkdesk as a leader in agentic and generative AI for the contact center.
- Launched and ran an AI expansion program that generated $1M AI ACV and $2M total ACV in 6 months (2024).
- Led CxO and technical RFP responses, vendor evaluations, and scalable API-based AI integrations.

VectorUSA (Remote) Aug 2021 to Jan 2022
AI Architect (Contract)

- Built a knowledge-powered virtual voice agent for a California school district using IBM Watson Assistant, Node.js, SIP trunking, and Watson Discovery.
- Developed question-answering systems on RoBERTa and GPT-3 with Watson Explorer, Watson Knowledge Studio, and Watson Discovery.
- Created conversational AI sales demos for enterprise customers including Nortel.

D'Agostino Electronics (Pittsburgh, PA) Jul 2020 to Jul 2021
Principal Architect

- Delivered AI and cloud solutions for enterprise clients across several industries, with measurable KPI gains.
- Built generative AI, conversational AI, NLP pipelines, web scraping, and structured data extraction on IBM Watson Explorer, Discovery, Assistant, and Machine Learning.
- Architected AWS, Azure, and GCP deployments with Docker, Kubernetes, and serverless compute.
- Built CPaaS and telephony integrations including Avaya Aura and Alcatel Rainbow; led technical sales presentations, SOW development, and RFP responses.

Deloitte Consulting (Pittsburgh, PA) Nov 2018 to Jul 2020
Specialist Master, AI and ML Solutions (Applied AI Group)

- Led enterprise AI strategy and delivery across financial services, utilities, logistics, and healthcare.
- Architected solutions on IBM Watson, AWS, Azure, and GCP, with a focus on conversational AI and enterprise search.
- Owned the full ML delivery lifecycle (MLops): data prep, model selection, training, and API deployment in Google Vertex AI.
- Built partner relationships and ran technical sales with Google, AWS, and IBM; mentored engineering teams in microservices, API integration, Google DialogFlow, AWS Lex, and IBM Watson Assistant.

IBM Watson (Pittsburgh, PA) Sep 2014 to Sep 2018
Worldwide Technical Sales Leader, AI Solutions

- Global technical sales strategist for Watson across industries and geographies; grew market penetration and multi-million-dollar revenue through hybrid-cloud and on-premises deployments.
- Sold AI solutions built on Watson SaaS, NLP, ML, Watson Explorer, Watson Knowledge Studio, and Watson Content Analytics, and architected the conversational interfaces and knowledge-extraction pipelines behind them.
- Ran global enablement and AI-adoption training for internal, partner, and customer teams; led workshops at IBM conferences and served as the global escalation point.

IBM (Pittsburgh, PA) Jun 2012 to Sep 2014
Technical Support Manager, AI and Big Data Platforms

- Led support and escalation for enterprise AI and big-data search platforms (Hadoop, MapReduce) for Fortune 500 customers, holding high CSAT through critical issues.
- Guided architecture for complex enterprise implementations focused on scale and high availability, and trained deployment teams and partners.

Vivisimo (Pittsburgh, PA) Jan 2006 to Jun 2012
Senior Director, Global Customer Support and Training

- Led the global organization for enterprise search and AI-powered data-discovery platforms: architecture, troubleshooting, custom integration, and team efficiency.
- Set up KPIs, proactive monitoring, escalation systems, and customer-satisfaction programs. Held 90%+ CSAT with strong retention and generated $100K+ in services revenue through advanced training and health checks.

EDUCATION

University of Pittsburgh, Master of Science (MS) in Physics
Ohio University, Bachelor of Science (BS) in Physics. GPA 3.8

CERTIFICATIONS

AWS Certified Solutions Architect, Associate • Microsoft Azure: Developer; Solution Architect • Google CCAI

AWARDS & RECOGNITION

National Merit Scholar (National Merit Scholarship Corporation) • Distinguished Professor Scholarship, full tuition (Ohio University)