

Kareem Arab

Applied AI Engineer | me@kareemarab.com | Remote, open to relocation

Applied AI engineer building production agents, voice systems, and product infrastructure. Product-minded engineer with startup and enterprise experience across AI, finance, healthcare, and travel.

Experience

Ada, Software Engineer, Voice AI, Nov 2024 - Present

- Contributed to Ada's Unified Reasoning Engine, a modality-agnostic AI agent harness powering reasoning across voice and digital channels.
- Led CPaaS integration improvements for Ada's AI Voice Agent, reducing telephony costs 85-95
- Led multilingual expansion for LLM-native knowledge ingestion, adding new language support and reducing search latency by 500ms.
- Designed long-silence detection for voice conversations, improving latency, robustness, and end-user conversation flow.
- Built LLM evaluation and A/B testing workflows to measure voice agent quality, latency, and production behavior.
- Owned privacy/data deletion pipeline work supporting enterprise compliance requirements across regulated customer environments.
- Led intern and technical interviews for the Voice team, contributing to 6 hires across interns and senior engineers.

Amadeus, Software Engineer, Mar 2021 - Nov 2024

- Designed and ran A/B tests for product features; analyzed results to drive data-informed decisions
- Led cloud migration from on-prem & GCP to Azure, improving scalability and reducing operational costs
- Built MFA system serving millions of users; migrated to Kubernetes achieving 99.99% uptime
- Improved incident response processes, reducing MTTR; mentored junior engineers

Neurovine, Founding Software Engineer, Apr 2019 - Feb 2021

- Zero-to-one: Built entire backend from scratch, including HIPAA-compliant serverless APIs on AWS Lambda
- Integrated real-time ML inference for patient concussion recovery; shipped to production
- Built low-latency Bluetooth stack for wearable EEG devices with end-to-end encryption

Selected AI & Product Work

- **Brisa**: Founded AI wealth platform with 1000+ users and \$58m+ assets tracked; #1 Fintech on Product Hunt.
- **SPC x OpenAI Hackathon**: Developed an AI tool for reducing online polarization using NLP and GPT models
- **Handshake**: Real-time group chat iOS app with event management. Tech: Swift, Firebase, WebSockets
- **RP**: High-performance HTTP proxy with LRU cache. Tech: Python, Multithreading

Technical Expertise

- **Applied AI**: AI Agents, Voice AI, LLM Evals, RAG, LangChain, LangSmith, OpenAI, Anthropic
- **Voice Systems**: Telephony, CPaaS integrations, latency optimization, silence handling, conversational UX
- **Backend & Infra**: Python, Go, TypeScript, Kubernetes, Serverless, AWS, Azure, GCP, Redis, MongoDB
- **Product Engineering**: React, Next.js, iOS, A/B Testing, REST APIs, WebSockets

Research

IoT Lab @ Carleton University, Research Assistant, 2017 - 2019

- Conducted ML research for smart grid energy systems, resulting in 2 published conference papers
- Developed an ML-based diabetes management tool
- Built real-time multi-modal data streaming system using Raspberry Pi and IBM Cloud
- Mentored multiple 4th-year capstone projects

Education & Achievements

Carleton University, B.Sc. in Computer Science, Spring 2020

- Shopify Build Things Hackathon App Award (2018): Most innovative iOS app
- Published researcher: [Google Scholar Profile](#)