KOBE YOUNG

Software Engineer

U.S. Navy veteran and software engineer with 3 years shipping production cloud-native systems, real-time data pipelines, and AI platforms to enterprise customers across AWS, Azure, and Databricks. End-to-end ownership from distributed backend design through infrastructure automation and customer deployment. Prior U.S. DoD Secret clearance (2016–2021).

Languages:	Python, Go, C#, C++, TypeScript/JavaScript, Dart, SQL, Bash
Backend / Web:	FastAPI, ASP.NET MVC, SignalR, SQLAlchemy, MySQL, REST, WebSockets, Auth0 / Okta (IAM)
Cloud / Infra:	AWS (Kinesis, Lambda, ECS Fargate, API Gateway, S3, Transcribe, Kendra, Bedrock), Azure (Functions, CosmosDB, Identity), Databricks, Terraform, Docker
AI / ML:	RAG & LLM systems, vector embeddings, multi-agent orchestration, AWS Bedrock, TensorFlow
Data Engineering:	Real-time streaming, ETL pipelines, Azure-to-AWS migrations, Delta Lake, Power BI
Frontend:	Flutter (cross-platform), TypeScript, Plotly, Chart.js

Industrial Technology Company (confidential) Sep 2023 – Present
Software Engineer, Houston, TX

- **Global Equipment Reservation & Tracking Platform**
  Architected a cross-site, real-time platform unifying 15 independent regional databases for global machine availability, reservations, and location tracking. Built the FastAPI backend (REST, auth, multi-site aggregation with conflict resolution, 176 ms average response time) and Flutter frontend (reusable component library, offline-safe networking). Provisioned and automated Azure infrastructure with Terraform (Functions, compute, storage, networking, identity, CI/CD); authored deployment runbooks adopted across engineering teams.

- **Real-Time Telemetry Streaming Pipeline**
  Designed a low-latency pipeline ingesting machine telemetry through AWS Kinesis into a .NET consumer broadcasting to SignalR dashboards, serving 1,793 CNC machines across 69 customer sites. Implemented shard polling with retry, exponential backoff, jitter, and cancellation orchestration; built composite routing keys for targeted subscriptions and throttled Plotly/Chart.js rendering. Sustained sub-15 ms p99 read latency, zero throughput throttling, and near-zero consumer lag.

- **Industrial CNC Diagnostics Chatbot (AI)**
  Built an AI maintenance assistant using audio feature extraction, vector embeddings, and documentation-grounded RAG over AWS Bedrock. Designed diagnostic flows that identify spindle and bearing anomalies. Deployed on ECS Fargate and operated 12 months in production, serving thousands of inference requests at under 0.1% server-error rate.

- **Enterprise Document + Video Retrieval Chatbot**
  Developed a multi-modal chatbot searching documents, long-form transcripts, and training videos. Automated ingestion (Transcribe → Kendra → vector retrieval → Bedrock) and built FastAPI orchestration with multi-source retrieval, reranking, grounding, and structured LLM outputs. Provisioned AWS infrastructure: API Gateway, ECS Fargate, ALB, IAM, secrets, and centralized logging.

U.S. Navy
Avionics Lead Troubleshooter & Quality Assurance Supervisor

- **Aircraft Carrier (E5), San Diego, CA** *Jan 2016 – Jan 2019*
  Lead troubleshooter for the aircraft generator maintenance division (3-phase 115 VAC generators and generator control units). Trained, managed, and mentored 10 sailors; delivered monthly safety training, contributing to a mishap-free 7-month operational deployment.

- **Naval Aviation Squadron (E5), Guam** *Jan 2019 – Jul 2021*
  Inspected and certified 400+ daily maintenance actions against fleet-wide standards, supporting 90% aircraft readiness. Coordinated multi-shift projects and maintained aircraft logs and records to audit-ready quality.

University of Houston
B.S. in Computer Science