Thong Do

Principal Architect · Forward Deployed Engineer

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SUMMARY

For 17+ years I have built distributed systems that have to work on the first try: live sports streams for millions of concurrent viewers, checkout flows that carry real revenue, and now production GenAI on Amazon Bedrock.

At AWS I work the way a forward deployed engineer does. I sit with the customer's team, find the real problem behind the request, prototype in days, and harden it into something their engineers can own. I still write the code, design the architecture, and lead teams of 15+ engineers through delivery.

EXPERIENCE

Senior Solutions Architect · Amazon Web Services, Solutions Architecture
Irvine, CA · 2026 – Present

- Lead an initiative of architects and engineers across enterprise customer engagements: set the technical direction, prioritize and assign the work, and keep each engagement on track from discovery to production.

Senior Cloud Delivery Architect · Amazon Web Services, Professional Services
Irvine, CA · 2022 – 2026

- Led a team of 15 engineers from the customer, partners and AWS to deliver a production GenAI call center for an enterprise customer on Amazon Connect, Amazon Lex and Amazon Bedrock (embeddings, prompt engineering, guardrails), from discovery to production launch, reaching 86% accuracy and helping cut operating costs by 30%.
- Led a team of 5 engineers to build a production conversational AI assistant for an enterprise customer on Amazon Bedrock, with RAG, prompt engineering and guardrails, from discovery through launch: 65% faster customer-service responses and 85% positive user ratings.
- Led cross-functional teams of 12+ engineers, owning team setup, requirements, architecture and delivery: about 30% faster delivery and 25% fewer post-deployment issues.
- Led an ML audience-prediction solution with a TV broadcaster's data team: +28% audience engagement and +15% advertising revenue.
- Migrated 100+ mission-critical analytics workflows to Amazon MWAA (Airflow) with zero business disruption: 40% lower cost, 55% faster runs.
- Designed distributed services and APIs for customers' private-network environments: 40% higher throughput at 22% lower infrastructure cost.
- Built Terraform and CDK infrastructure as code and CI/CD across environments, cutting deployment time by about 75%, and set up monitoring and logging standards for faster incident response.
- Mentored engineers and set engineering standards for security, observability and delivery on customer teams.

Cloud Delivery Architect · Amazon Web Services, Professional Services
Remote · 2021 – 2022

- Architected the API management layer for a major US sports broadcaster's live streaming: 6.5M+ concurrent viewers at 99.99% uptime.
- Led the design of an onboarding platform that took software vendors onto AWS Marketplace about 40% faster.
- Built container-based remote infrastructure for edit-in-the-cloud studio applications, about 35% lower operating cost.

Integration Architect (AppDev) · Amazon Web Services, Professional Services
Remote · 2019 – 2021

- Led the architecture of a serverless live-to-VOD pipeline supporting 300K+ concurrent viewers and a high-throughput serverless API for 4K live sports (390K+ viewers).
- Built real-time transcription and translation for live captions at a major gaming conference: 40K on site, 300K+ online.
- Led the architecture for global OTT delivery at high-profile movie premieres (about 25% lower latency), and moved a media metadata platform from quarterly to bi-weekly releases with CI/CD.

Senior Software Engineer · Vibrant New Media
Remote · 2018 – 2019

- Built frame-accurate live-to-VOD clipping on AWS Media Services.
- Built VOD encoding to adaptive-bitrate formats with AWS Elemental MediaConvert, and video encryption services.
- Ran media processing as containerized services on ECS.

Technology Leader · City Beauty
Woodland Hills, CA · 2016 – 2018

- Led the rebuild of the checkout and upsell platform on a serverless AWS backend, lifting revenue by about 18%.
- Integrated payment gateways and Shopify with PCI-aware Node.js APIs.
- Set up containerized CI/CD with Docker and AWS SAM.

Software Engineer · California State University, Fullerton
Fullerton, CA · 2013 – 2016

Software Engineer · Calolo
Remote · 2015 – 2016

IT Specialist · California State University, Fullerton
Fullerton, CA · 2007 – 2013

SKILLS

Agentic GenAI
Amazon Bedrock · Agents and tool use · RAG · Evaluation and guardrails · Prompt engineering · LiteLLM

Cloud and architecture
AWS · Serverless · Distributed systems · API design · Event-driven design · Security

Modernization and data
Legacy to cloud migration · Airflow / MWAA · Glue · Redshift · DynamoDB · PostgreSQL · Redis

Infrastructure and delivery
Terraform · CDK · CloudFormation · Kubernetes · Docker · GitHub Actions

Observability
Datadog · Grafana · ELK · New Relic

Programming languages
Python · TypeScript · Go

Media and streaming
Live and VOD pipelines · AWS Elemental · CloudFront at scale

Spoken languages
English · Vietnamese

CERTIFICATIONS

AWS Certified Solutions Architect – Associate

AWS Certified Developer – Associate

EDUCATION

MS, Education (Computer and Information Sciences), California State University, Fullerton (2010 – 2012)

BS, Computer Science, California State University, Fullerton (2002 – 2007)