

# Ash Isaac

## Technical Leader in Cloud & DevOps

- IT/Cloud Architect, Engg. Manager (DevOps)
- AWS Certified Solution Architect (Professional)

**Currently:** Principal IT Architect at [Federal Reserve Bank of Minneapolis](#).

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## Profile

- 10+ years in Software Engineering, Architecture and Technical Leadership
- Enterprise Cloud (AWS/Azure), DevOps, Serverless, Containers & Microservices
- Experience in security & regulatory compliance for PII/PHI, HIPPA/FedRAMP/FISMA

## Education

### University of Madras, VIT

Bachelor of Electronics and Communications Engineering, 1991-1995

## Certifications

[Amazon Web Services: Certified Solutions Architect \(Professional\)](#)

[Amazon Web Services: Certified Developer \(Associate\)](#)

[Amazon Web Services: Certified Solutions Architect \(Associate\)](#)

[MongoDB University: M101X - MongoDB & MEAN Stack](#)

## Technical Skills

IT Leader in Cloud migration, Cloud-native development & DevOps. Experienced in architecting enterprise systems that are scalable, resilient & secure using serverless, containers & microservices.

### Cloud (AWS & Azure)

**AWS:** VPC, IAM, EC2, RDS, S3, Route53, Lambda, SQS, API Gateway

**Azure:** Azure DevOps, Pipelines, App Service, Functions, SQL Database

**Containers:** Docker, Docker Swarm, Kubernetes, EKS, ECS/Fargate, Batch

### Server-side

**Java:** Spring Boot **Python:** FastAPI, Flask

**Node.js:** Restify, Express, Hapi.js

**PHP:** Magento, Symfony, Slim

### Databases & Tools

**Datastores:** Postgres, MongoDB, DynamoDB, MySQL, MS SQL Server

**SCM/Build:** Bamboo, Jenkins, Stash, Git, Artifactory

**Automation/ Tools:** AWS CDK, Terraform, Ansible, Puppet, Packer, Vault, Consul

**Testing:** JMeter, Karma, Jasmine, Selenium

### Frontend

**Javascript:** jQuery, KnockoutJS

**Frameworks:** Bootstrap, Zurb Foundation

# Professional Experience

## Principal IT/Cloud Architect

Federal Reserve Bank of Minneapolis

**Period:** since Nov 2019

Federal Reserve Bank of Minneapolis is one of 12 Federal Reserve Banks, serving 6 states of the Ninth Federal Reserve District.

- Advise 9th District VP/AVP/Directors of Treasury Retail Services, Research, InfoSec and Data Privacy business lines on IT/Cloud projects and initiatives as Lead Architect
- Architect on the TRIM (MyTreasury) AWS Cloud project with a specific focus on Security & Compliance
- Lead Architect on the Business Payments Coalition (BPC) eInvoicing Network project, which produced the [Open Source eInvoicing Onboarding Toolkit](#)
- Provide expert guidance & implementation recommendations on AWS/Azure Cloud, Hybrid and COTS/Enterprise software
- Design architectural and security patterns along with Information Security & Compliance including PoCs
- Drive DevSecOps adoption & Software Engineering best practices in Operations and Application Development Teams
- Formulate 9th District strategy for Cloud Migration, Data Management and DevOps Tooling

## Engineering Manager & Cloud Architect

MedNet Solutions

**Period:** 2014 - 2019

MedNet Solutions is a leading eClinical technology company offering a Cloud-based Enterprise Electronic Data Capture (EDC) SaaS eClinical platform. I managed the Platform & Operations team in charge of Release Engineering and Cloud Infrastructure.

- DevOps & Cloud automation on AWS (VPC, EC2, IAM, SQS, RDS, Route53, DynamoDB, S3, ECS/Fargate, SES, CloudWatch)
- Container orchestration using Docker Swarm & Kubernetes using Puppet and Terraform
- Serverless applications & Microservices using Node.js/API Gateway, Spring Boot/Docker
- Enterprise SaaS migration and performance, load and chaos testing.
- Cloud strategy, cost management, security and regulatory compliance

## Owner/Principal Engineer

Data-Worx Consulting LLC

**Period:** 2004 - 2014

Founded a software consulting firm, specializing in data-driven software for businesses.

- Launched BuyMage: Magento eCommerce integration the BuySeasons Direct® dropshipping program
- Architected MES applications for Production Scheduling and Shop Floor Management (Python/MySQL).
- Built TREK (.NET/MVC/WPF/SQL Server) a business application integrating with TigerPaw ERP.
- Authored custom Magento extensions and Developed REST APIs for RE/MAX Cayman Islands

## System Analyst

CGI, Inc

**Period:** 1996 - 2002

- System Analyst and Team Lead
- Mainframe Business applications (DB2, Assembler, COBOL)
- **Clients:** Fingerhut Corp., EBSCO Subscription Services, DISCOVER/Novus Network Services

## Staff Mentor

Segway/Campus Journey

**Period:** 2002 - 2014

- Mentoring students in social entrepreneurship at the U of M (Twin Cities) campus