

# Andrew Malvani

Building resilience, scalability, and automation

## EXPERIENCE

### **General Atomics, San Diego, CA** **Lead AI/ML Engineer**

June 2024 - Present

Led the adoption of Generative AI tools in the IT department. Led the team to bring code generation tools into the enterprise, enabling developers to save hours on menial coding tasks

Developed AI-powered applications using RAG and agent-based workflows to create complex automations with real creativity and intelligence

Architected, stood up, and managed AI and ML services in Azure and AWS (including SageMaker, AzureML, Kendra, Azure AI Search, etc)

Engaged with SLT and other business towers to design a governance and compliance framework around generative AI to ensure safety and security of proprietary data

Stood up generative AI services on-prem to allow full control over AI software and hardware for highly sensitive tasks

Reduced the time to stand up new environments by almost 100% by implementing IaC via Terraform and CI/CD pipelines to make infrastructure DRY and declarative

Reduce time to delivery from months to weeks by implementing agile development and DevOps practices to fail fast and iterate quickly

Eliminate time spent troubleshooting deployment issues by creating dev/prod environment parity

### **General Atomics, San Diego, CA** **Systems Administrator**

February 2023 - June 2024

Increase resilience and scalability of the environment by replacing legacy systems with modern solutions

Ensure no new vulnerabilities were introduced to the high-security environment by shifting security left in the development process

Saved over \$200,000 and mitigated critical vulnerabilities by rapidly migrating MDM infrastructure from legacy to modern solution for over 6000 mobile devices

Began migration of configuration management tasks from legacy System Center solution to modern Ansible solution

## Certifications

CompTIA Network+

CompTIA Security+

CompTIA CySA+

Hashicorp Terraform Associate

Tenable.sc Specialist

AWS Solutions Architect Associate

## Skills

**Generative AI** frameworks like LangChain, Semantic Kernel, and LlamaIndex

Building **Machine Learning** models to make predictions based on proprietary data

**Coding** in Python, Javascript, Bash, and Powershell

**Cloud-native** technologies like **Docker** and **Kubernetes**

Infrastructure as Code (IaC) tools including **Terraform** and **Cloudformation**

Automation pipelines using **Github Actions**, **GitLab CI/CD**, and **Jenkins**

Monitoring deployments using **Azure Monitor** and **CloudWatch**

## EDUCATION

**UC Santa Barbara, Santa Barbara, CA — B.A. Psychology**

July 2013 - Sept 2017

**Tillster Inc, San Diego, CA**  
***IT Strategic Analyst (Systems Administrator)***

October 2021 - February 2023

Deploy workplace automations using Mulesoft, Jenkins, and AWS Lambda with Python and Javascript to save on hundreds of man hours per year while improving security and compliance through consistent application of policy

Vulnerability scanning using Rapid7 and Nessus, and remediating vulnerabilities where found

Maintain high availability, security, and integrity in AWS, GCP, and Azure cloud environments collaboratively with the DevOps, Data Science, and Systems Engineering teams

Ensure compliance with PCI-DSS and ISO 27001 standards throughout the entire IT infrastructure

Build and maintain CI/CD pipelines using Github, Bitbucket, and Jenkins

Achieve simple, consistent, and secure user life cycle across over 40 SaaS applications with strong IAM & SSO configurations and robust integrations across the environment

Utilize agile methodology to achieve high efficiency in bringing value to end users, and to improve creativity and innovation within our team

**Reynolds & Reynolds, San Diego, CA**  
***Compliance & Marketing Consultant***

April 2018 - October 2021

Manage a territory of over 100 stores and over \$1m in annual sales, ensuring compliance with government and manufacturer regulations.

**Enterprise Rent-A-Car, Granada Hills, CA — *Management Trainee***

March 2017 - April 2018

Ensure total customer satisfaction with rental processes, managing over 100 individual customers per month.