

## CAREER SUMMARY

### Principal AI/ML • Multi-Cloud • DevOps Automation Architect

**Highly motivated, results-oriented, and innovative with complex problem-solver** with analytical and driven mindset. Dedicated to achieving demanding development objectives according to tight schedules while producing impeccable code. **Principle AI/ML /Multi-Cloud / DevOps Automation Architect with 20 years** of successful versatile hands-on enterprise architect leader experience in software industries. **Recognized consistently for performance excellence** and contributions to success in multinational business demands. **Strong strengths** in thoughtful leadership, researching, planning, evaluating, designing, architecting systems, report and **governance, enforcing enterprise standards** and protocols. **Expert in core ML/AI/CI/CD related software architecture** and engineering disciplines, including Cognitive technologies, Neural Network, Algorithms for Gaming, Automation, NLP, Deep learning, and multi-Cloud infrastructure Architect. **Expert ability to identify vulnerabilities in an organization's network or infrastructure**, and then address the issues to prevent incidents or attacks. **Performed penetration testing and gain the knowledge and skills** to implement countermeasures to prevent cybersecurity attacks. **Defines and leads technology proof of concepts** to ensure feasibility of architecture solutions. **Strong technical acumen** with the ability to understand and determine best courses of action.

- ✦ **Research, Architect, Designed, developed, and maintained metadata** driven data pipeline automation framework(s) for batch, event, and streaming data in cloud native environment
- ✦ **Develop data modeling standards, governance, automation frameworks** and developer tooling to standardize and accelerate data delivery across the organization.
- ✦ **Developed, maintained, and managed Security Assessment and Authorization (SA&A)** packages that include System Security Plans (SSP), Contingency Plans (CP), Security Impact Analysis (SIA), POA&Ms, and other relevant security documentation for existing and new systems.
- ✦ **Developed and maintained information security program strategic** and tactical goals and objectives and program outreach/communication plans.
- ✦ **Rapid prototyping and communicating proof of concepts** for key technology decision to collaborators and other technology leaders.
- ✦ **Build end to end data pipelines from source** to target ensuring data quality, consistency and observability using MLOps and DevOps principles
- ✦ **Experience working/collaborating** with Master Data Management, Metadata Management and Data Governance
- ✦ **Displays strong thought leadership** in pursuit of modern architecture principals and technology modernization
- ✦ **Exploited Advanced Kali Linux system** to do penetration-testing main tool, including hundreds of modules for scanning, exploitation, payloads, and post exploitation.

## TECHNICAL EXPERTISE & CERTIFICATES

[Skillsoft Learning: Certificates](#) [LinkedIn Learning: Certificates](#)

**Certificates:** DevOps Engineer, Cloud Engineer, CloudOps Engineer, Multi-Cloud Architect

**Certificates:** AI Apprentice, AI Developer, AI Practitioner, AI Architect

**Certificates:** ML Programmer, DL Programmer, ML Engineer, ML Architect

**Platforms:** H2O, IBM Watson, MS Cognitive Services, Amazon Lex, Amazon Sage maker.

**Frameworks:** Microsoft Cognitive Toolkit (CNTK), Keras, Tensorflow, Pytorch, MXNet, Cortex, Scikit-learn, BERT, VGG-Face Model.

**Datasets:** Image, text, sound, signal, physical, biological, anomaly.

**Cyber Security:** CCSP, CISSP, SY0-601: CompTIA Security+, DevSecOps, HashiCorp Vault.

**Tools:** Git, Jenkins, Docker Architecture, Kubernetes Architecture, HashiCorp Tools, Angular, Elastic Stack, SoarQube, Node.js, React, .Net Core, Ansible, Puppet, Chef, Red Hat, Nagios, Selenium, Google Cola, Jupiter notebook, Spider.

**Methodology:** Agile, Kanban, Scrum, SAFe Team, SAFe DevOps,

**Language:** HTML, JSON, XML, CSS, JavaScript, PHP, JAVA, C++ and Python.

**Multi-Cloud:** AWS: AWS DevOps Engineer (Professional) Certification, Master the AWS Well-Architected.

GCP: Google Cloud Architect - Cloud Design, Network Components, Web Applications & Name Resolution.

AZURE: Azure Architect Technologies Certification, Deploy and Manage Virtual Machines, Deploy and Manage Virtual Machines, Configure and Manage Virtual Networks, Manage Identities.

**Network Infrastructure:** NFV, SDN, SD-WAN, DPDK, MPLS, VOIP, TCP/IP, DNS, DHCP, VPN, IAS, DOCSIS. Network Architecture and design: Active Directory, Group policy, Terminal Services, Routing and Remote Access, wiring and cable terminations, Hardware based CPE (Intel and ARM).

## PROFESSIONAL EXPERIENCE

**ASRC Federal**, Fort Collins, CO

**April-2021 – Present**

*Delivers successful mission and elevates performance for federal civilian, defense, and intelligence agencies.*

### **Principle AI/ML/Multi-Cloud DevOps Automation Architect**

Researched, designed, deployed, automated and managed AWS cloud-based production system, to ensure the availability, performance, scalability, and security of production systems. Built, release and configuration management of cloud production systems. Defined and documented cloud solution architecture(s) including technical designs and diagrams implementation cloud infrastructure solutions for distributed systems and application. Implemented cloud infrastructure solutions for distributed systems and applications. Pre-planned cloud migration and cloud-native solutions. Automated complex operational tasks using common scripting and specific tools utilities.

- ***Deployed and managed applications*** running on a mix of Kubernetes, EKS, AKS, GKE and introduced optimizations; resulted in a \$15k savings per month
- ***Analyzed, reversed, and finalized the specifications*** for tools installation, build, and deployment automation for 40+ services
- ***Transformed market data into actionable strategies*** for continual process change; resulting in an efficiency increase of 65%
- ***Architecture CI/CD*** pipeline automation deployments with AWS/Azure/GCP for ML module
- ***Implemented, Orchestrated, and managed Docker containers*** with Kubernetes cluster
- ***Encoded a categorical integer*** filed to a from suitable for ML algorithms
- ***Identified method of viewing correlations*** in a dataset using Pandas and Seaborn
- ***Enumerated risks in feature selection*** for simple and multiple regression

- **Enumerated ways to evaluate a linear regression** model in Scikit Learn after it has been trained.
- **Analyzed data streams** from different platforms and restored their integrity with algorithmic constraints.
- **Developed a reinforcement learning algorithm** for optimal advertising strategies on FB (TensorFlow).
- **Developed NLP algorithms to clean**, transform, and integrate data streams from different sources.

**Hotel Engine**, Denver, CO

**Dec-2018 – Mar-2020**

*Provides hotel-booking platform for enterprise clientele designed for business travel.*

#### **DevOps Automation Engineer - Enterprise**

Responsible for maximizing the value through supporting, automating, and optimizing mission critical deployments in AWS, Azure and GCP, leveraging configuration management, CI/CD, and DevOps processes. Created and maintain fully automated CI/CD pipelines for code deployment using Tomcat Server and PowerShell. Actively manage, improve, and monitor cloud infrastructure on AWS, EC2, S3, and RDS, including backups, patches, and scaling. Built and deployed Docker containers to break up monolithic app into microservices, improving developer workflow, increasing scalability, and optimizing speed. Implemented Kubernetes cluster AWS (EKS) to manage and orchestrated containers for scalability.

- **Automated finance system cut business costs by 35%**, increased productivity rates by 85%, and eliminated billing error 95%.
- **Developed and deployed hotel reservation** platform, API integration, and UX/UI design for enterprise.
- **Effectively negotiated sprint goal with the team by slashing 20% of the time** in a single quarter and was able to coordinate 95% of products roadmap completion.
- **Utilized Python** for inspecting, cleansing, transforming, and modeling data.
- **Developed new API** integration application with JSON for communicating with centralized hotel API.
- **Utilized inventory management tool** such as Ansible and NetBox for provisioning, configuration management and application deployment.
- **Implemented testing environment for Kubernetes** and administrated the Kubernetes Clusters. Migrated on-site solutions to cloud-based offerings, such as Amazon's AWS.
- **Responsible to setup the execution of automated tests and development process** using version control System Git and to development Continuous Integration (CI) tools with Jenkins.
- **Utilized (IAST) solution to identify and manage security risks** associated with vulnerabilities in running web applications using dynamic testing techniques.
- **Provided leadership in the DevSecOps areas of Vulnerability Scanning**, Certificate Management, Password Policy Management, Data Analysis of security monitoring outputs, coordination of Remediation Patching, and other daily Security and Compliance efforts.

**Chetu Inc.**, Plantation, FL

**Jan -2017 – Nov-2018**

*Software Development Company provides tailored software solutions from industry specialized developers.*

#### **Agile Product Manager – Enterprise**

Identified, designed, and executed product initiative plans to meet customer/user needs: product vision, roadmap, and requirements documentation. Lead development team to create goals and implementation strategies, which support vision and the mission. Owned measure and demonstrate progress towards goals with metrics created and tracked in partnership with leadership and analytics team.

- ***Restructured over budgeted and error-plagued vehicle tracking and parking project*** into a new innovative solution delivering on time and within the budget, estimated over-headed cost was \$2.9M, cut-down to \$1M at the completion receiving “Excellent Award” from the CEO.
- ***Devised, developed and delivered vehicle tracking and agriculture GIS custom software*** application for enterprise clientele.
- ***Pioneered GIS in the agriculture*** sector by designing interactive mapping system using custom GIS application to integrate into drone and unmanned aerial vehicles (UVA).
- ***Utilized SAFe scale framework environment*** and version control system reducing development time and increasing the rate of successful deployments.
- ***Utilized Mongo DB*** NoSQL database to create, read, update and delete documents data.
- ***Used Kubernetes*** to orchestrate the deployment, scaling and management of Docker containers.
- ***Participated in the development and support*** of the testing program aimed at supporting multiple testing efforts simultaneously
- ***Automated the deployment of 90+ cloud servers*** using Docker, Kubernetes, and Aws with the help of python
- ***Simplified infrastructure automation by utilizing tools like Vagrant, Terraform, Packer, and Vault***, you can manage virtual machines, define declarative infrastructure as code, automate machine images, and manage secrets across your infrastructure.
- ***Provided technical support*** to regulatory agencies, external auditors, and internal auditors, as required, to respond to audits and examinations of the Bank's control environment

**Electronics Row**, Wheat ridge, CO

**Dec-2011 – Dec-2016**

*Consumer electronics products manufacturer and corporate incentive program for corporation industry.*

### **Product Development Manager**

Lead and supported the Product Owners Community of Practice by facilitating collaboration of crossorganizational teams to establish, develop and roll out new and enhanced capabilities. Recognized as the "go to" leader and trusted advisor for product set. Work collaboratively with the team of Product Owners. Communicate value and status to various stakeholders and levels of management.

- ***Conceptualized, built/developed e-commerce/business platform*** for incentive programs launched, marketed, and maintained enhanced product features annual \$8.6 million in revenue.
- ***Responsible for product enhancement, market campaign, market research*** and maintained solid proprietary responsible for increasing subscription, for incentive program throughout USA and Canada.
- ***Led continuous improvement efforts*** to develop interfaces in support of multiple databases, systems, and technologies including VMware, AWS and MS SQL.
- ***Managed Docker orchestration*** and Docker containerization using Kubernetes.
- ***Utilized Gherkin Language*** to develop Behavior Driven Testing.

**Integra Telecom**, Denver, CO

**Dec-2009 – Nov-2011**

*Telecommunication infrastructure and Service Company*

### **Manager, Enterprise Account Executive**

Maintained strong relationship with c-level executives across all verticals, proactively maintain pipeline using our CRM, Salesforce, achieve and consistently exceed monthly sales goals. Developed skills necessary to transition into an enterprise sales manager role.

- ***Maintain sole responsibility for all sales and manage a \$3.2 million*** territory throughout the USA.

- *Serve in a consultative role to provide clients with custom designed hardware and software* solutions and system Integration Company with its own line of distributed process control equipment.
- *Wrote proposals, performed cash flow analyses*, determine costs, and negotiate contracts, participated in panel building of systems that included a 5000-wired connection with 70 of the company's hardware devices.

**MasTec Technology**, Centennial, CO

**Dec-2006 – Nov-2009**

*Infrastructure engineering and Construction Company*

**Technical Sales Consultant**

Consultatively, sold A/V hardware, security surveillance, automation system, intercom technology and service to the commercial and residential constructions companies, developed and delivered technical presentations, product demo, prepared contract proposal, floor plans, bid estimation and SLA documentations.

- Consistently exceeded sales goal by an average of 150% ranked # 1 (Q2, Q3, and Q4 FY 06).
- Grew Denver area territory 12% within first 6 months for company with annualized sales of \$3 million.
- Exceed industry average in profit generation: 10% in sales profit vs. industry average of 2% 7%.

**Long Building Technologies**, Englewood, CO

**Jan-2004 – Nov-2006**

*Building integrator provide products and services in building automation and security solutions.*

**IT Network Administrator**

Designed and constructed local area network and wide-area network connecting seven location offices to corporate headquarters. Oversaw setup of servers and desktop workstations. Recruited and trained network and desktop support technicians. Prepared budgets and managed expenses. Configured routers, firewalls, domain name services, e-mail, Web, and ftp services.

- Designed new systems application that provided Web-based monitoring of all telecommunications.
- Established technical infrastructure requirements, including voice communications, voice over IP, hardware/software applications, PBX, CMS, server applications, SQL database and Meeting Place.
- Analyzed costs resulting in reduction of \$5M in redundant technology-related expenses.
- Identified significant drain on corporate budget, reduced expenses by 50% within 90 days.

## EDUCATION

[Skillsoft Learning: Certificates](#) [LinkedIn Learning: Certificates](#)

**Bachelor, Major Computer Science**, 1996 – Bhaktivedanta Gurukula International, Mathura, UP India

**Information Technology, Diploma** 1993 – Sri Dham Mayapur School, Nadia, WB India

**High School**, 1989 – Siddhartha Vanasthali Institute, Kathmandu, Nepal