

# UTSAV THAPA

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4400 Smokey Quartz Ln, Arlington, TX, 76005

## EDUCATION

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**Bachelor of Science**, Computer Science

University of Southern California (USC)

**Honors:** Quest Scholar, Gilman Scholar, Neubauer Scholar, Leonard Shoninger Scholar

## SKILLS

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Python, Node.js, Go, C++, C, Java, React, Flutter, React Native, Next.js, HTML/CSS, Git, SQL, MongoDB, NOSQL, PHP, Redis, AWS, Spring Boot, Airflow, Kubernetes, Docker, MWAA, Vector Databases, LangChain, RAG, Generative AI, AWS Bedrock

## EXPERIENCE

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**Artisan Studios**

Senior Software Engineer

March 2023 - Present

- Orchestrated the migration from a Kubernetes-based Apache Airflow environment to Amazon's Managed Workflows for Apache Airflow (MWAA), achieving a 40% improvement in data processing efficiency.
- Constructed 125+ robust data pipelines using Airflow, Python, and SQL, facilitating real-time analytics and directly impacting business decision-making.
- Automated the DevOps cycle, employing tools like Jenkins, Docker, and Terraform for CI/CD pipelines, automated testing, and infrastructure as code, resulting in a 50% increase in deployment speed.
- Engineered a Retrieval-Augmented Generation (RAG) system using LangChain to automate knowledge retrieval, reducing data lookup time by 72% and increasing customer satisfaction.
- Revamped the local development setup using virtual environments and efficient build tools, leading to a 75% increase in developer efficiency.

**Tulip**

Software Development Engineer

November 2021 - March 2023

- Designed and deployed robust ETL pipelines using Apache Airflow and Python, efficiently transferring terabytes of data to AWS Redshift clusters. Leveraged React and D3.js to create custom inventory and fulfillment dashboards, optimizing data visualization and resulting in a 30% increase in actionable insights.
- Established a high-throughput data tracking and collection solution using GoLang, and MongoDB, enhancing data collection capabilities by 52%.
- Fortified the reliability of the development lifecycle by orchestrating CI/CD workflows to integrate Github with Jira using Github Actions, achieving a 15% increase in reliability.

**Nokia**

Software Development Engineer

August 2019 - November 2021

- Pioneered a distributed log collector tool using Python and Kubernetes, optimizing data retrieval algorithms and reducing log collection times across multiple nodes by 65%.
- Transformed legacy systems to cloud-native architectures using AWS and Docker, achieving a 25% increase in resource utilization.
- Spearheaded the development of a feature module for Nokia's Smart Plan Suite using Java and Spring Boot, improving system scalability and achieving a 20% increase in processing speed.

**USC Office of Overseas Studies**

Student Developer

August 2018-May 2019

- Modernized a digital Check-In System using React and Node.js, reducing administrative overhead by 80%.
- Optimized user-flow and database queries to decrease average wait times by 10 minutes per student, enhancing overall user experience and efficiency.

**Fidelity Investment**

Software Engineer Intern

May 2018 - August 2018

- Deployed a high-throughput RESTful API using Node.js and AWS SDK, integrating AWS STS for temporary credential generation; optimized request handling to reduce API latency by 45%.
- Engaged in low-level architecture planning with the Fidelity CTG Architecture team, producing class and sequence UML diagrams; contributed code to core modules of the application, utilized Git for version control, and carried out code reviews.