# **Vatsal Goel**

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## **PROFESSIONAL EXPERIENCE**

Software EngineerOct 2023 - PresentUniversity of UtahSalt Lake City, UT

Streamlined record ingest workflows through ticketing systems, reducing processing time by 30%

- Engineered data verification workflows with Python, reducing manual effort by 70% and ensuring 99.9% data accuracy
- Automated metadata validation and extraction processes using Python and Bash, enhancing digital preservation integrity across 1M+ records

### Software Engineer – Full Stack

Oct 2021 – Oct 2022

XGRO Technologies

Pune, India

- Developed full-stack e-commerce platforms using React, SQL, and REST APIs, improving system scalability
- Optimized backend queries, caching, and API response times, reducing page load times by 20% and bounce rates by 12%
- Designed and implemented responsive UI/UX with Figma, CSS, and Adobe Creative Cloud, increasing user engagement by 25%

## **Video Engineering Lead**

Aug 2021 – Apr 2022

My Equation

Remote

- Led the video engineering team, overseeing post-production workflows for 10+ digital media campaigns
- Streamlined video editing workflows, reducing post-production time by 30% while maintaining high-quality production standards
- Managed a team of 5+ editors and designers, optimizing video content for social media, resulting in a 25% increase in audience engagement

#### **EDUCATION**

UNIVERSITY OF UTAH May 2025

Master of Science in Computer Science

#### **SRM INSTITUTE OF SCIENCE & TECHNOLOGY**

May 2023

Bachelor of Science in Computer Science

# **TECHNICAL SKILLS**

Languages: <u>Advanced</u>: C/C++(5yrs), Python(4yrs) | <u>Intermediate</u>: JavaScript(3yrs), Java(2yrs) | <u>Familiar</u>: SQL(1yr), Go (1yr)

**Frameworks & Libraries:** Flask, Node.js, Express.js, REST APIs, React, TensorFlow **Cloud & DevOps:** AWS, Docker, Kubernetes, Terraform, CI/CD, Git, Bash, Agile

#### **PROJECTS**

CineMatch | Personal Project (~80 hours) - GitHub

Jan 2025

- Built a Flask-based backend with MySQL, integrating a React frontend for seamless user interactions
- Optimized API response time by 40% through query optimization & caching techniques
- Developed a movie recommendation system leveraging collaborative filtering & sentiment analysis for personalized suggestions

# DNS Server | Personal Project (~60 hours) - GitHub

Nov 2024

- Constructed a high-performance DNS server leveraging Python and RFC standards, handling up to 5K queries/second
- Enabled support for recursive query handling and diverse DNS record types, ensuring scalability across large datasets with 50% faster response times through caching

# Raft-Based Fault-Tolerant Key-Value Store | Academic Project (~120 hours) - Project Reference

Sep 2024

- Architected a robust key-value storage system in Go using Raft consensus, distributed systems and concurrency
- Delivered fault-tolerant capabilities through leader election, log replication, and state machine execution, ensuring consistency and resolving 95% of network partition issues within minutes