

SKILLS

Languages	Python, Java, JavaScript, Typescript, Go, C#, Erlang, Bash/Shell, SQL, PHP, Groovy, Erlang, HTML/CSS
Frameworks	Node.js, Express, React, Angular, .NET Core/Framework, Spring Boot, Flask, React Native
Tools & Cloud Platforms	Azure, AWS, GCP, Kubernetes, Docker, Databricks, Jenkins, Terraform, TFS/Azure DevOps, Git, JIRA, Figma
Database & Other Tools	MS SQL Server, Postgres, MySQL, Cassandra, MongoDB, Neo4j, Apache Spark, Dask, Hadoop, REST, gRPC

TECHNICAL EXPERIENCE

GRADUATE TEACHING ASSISTANT

SEP 2023 — DEC 2023

Concordia University

Montréal, QC

- Assisted with creating lesson plan and instructions for the undergraduate course COMP 348 Principles of Programming Languages.
- Mentored 80+ students on the use of C, Python and Clojure programming languages through weekly tutorials and assignments.

SYSTEMS ENGINEER

AUG 2020 — NOV 2022

Tata Consultancy Services, Johnson & Johnson

Bangalore, India

- Engineered Industrial IoT products for the life science industry, serving as Developer, Site Reliability Engineer and Team Lead.
- Designed REST APIs, PySpark jobs, and services for tasks like IoT telemetry data ingestion, anomaly alarm-alerts, OTA for IoT edge devices, and health check/monitoring services across on-premises & cloud environments using Python, NodeJS, C# (.NET Core) and Go.
- Revamped existing IoT solutions to improve scalability and availability through microservice design using Kafka, Azure IoT PaaS solutions, Kubernetes and implementing enhanced data management practices like batch processing and cold storage migration.
- Spearheaded a DevOps transformation by implementing CI/CD pipelines through Jenkins and orchestrating deployments on Kubernetes while automating and streamlining processes like DNS and certificate management within Kubernetes.

CO-FOUNDER - CTO | SOFTWARE SOLUTIONS LEAD

JUN 2019 — AUG 2020

ZALT Technologies LLP

Chennai, India

- ZALT aimed to leverage technology to build an innovative digital infrastructure and integrate it with drones to develop an end-to-end ecosystem for optimizing the e-commerce supply chain.
- Developed a SaaS supply-chain routing solution to automate and optimize delivery manifests and route planning for a fleet of delivery riders in real time. Leveraged IoT, external APIs, and data analytics. The product was acquired by our investor Bylane Logistic.

TEAM LEADER | SOFTWARE ENGINEER

JUL 2016 — JUN 2020

SRM UAV

Chennai, India

- Headed an undergraduate student organization specializing in R&D of Unmanned Aerial Systems.
- Developed solutions, managed the team resources and coordinated with the university and sponsors.
- Designed solutions like the antenna tracker system and ground control system, responsible for transmitting and receiving telemetry and control data between the UAV and ground control station, where this data would be displayed on the path planner interface.

EDUCATION

Master of Applied Computer Science, CONCORDIA UNIVERSITY

Sep 2022 - Jan 2024

Accomplishments: *Dean's List for Academic Excellence, Golden Key Honour Society. GPA: 3.93*

Relevant Coursework: Distributed System Design, Advanced Programming Practices, Programming and Problem Solving, Algorithm Design, Computer Networks, Big Data, Applied AI, AI for Networked Multimedia Systems, Comparative Study of Programming Languages.

Bachelor of Technology in Information Technology, SRM UNIVERSITY

Jun 2016 - Jul 2020

ACADEMIC PROJECTS

Context-Aware Bitrate Ladder Construction using Deep Reinforcement Learning for Adaptive Video Streaming by OTT Providers. [Paper](#)

- Solution that considers content & context to create dynamic bitrate ladders. Developed using TensorFlow and trained on a GPU cluster.

Early Identification and Classification of Plant Disease with a comparative analysis of various CNN Models. [Paper](#)

- Application that detects and classifies plant diseases using CNN. Developed using PyTorch and achieved an accuracy of 98%.

Distributed Systems for a Data Ingestion, Curation, and Visualization Pipeline. [Report](#)

- Solution demonstrating distributed data processing using Apache Casandra, Apache Spark deployed on self-hosted Kubernetes on GCP.

Academic Credential Verification Using Blockchain [Paper](#)

- Decentralized application developed using the Ethereum blockchain and React that stores immutable, verifiable student transcripts.

CERTIFICATIONS

Azure DevOps Engineer Expert: certificate	Microsoft	Azure Developer Associate: certificate	Microsoft
Azure IoT Developer Specialty: certificate	Microsoft	Azure Fundamentals: certificate	Microsoft
Architecting with Google Kubernetes Engine: certificate	Google	Google Cloud Platform: Core Infrastructure: certificate	Google

ACHIEVEMENTS

- Silver medal for paper on: Swarm Optimization of Multiple UAVs for Resource Allocation in HADR Operations. [Paper](#)
- Silver medal for paper on: Design and Architecture of an Amphibious Reconnaissance Vehicle for Aerial & Underwater Operations. The project was funded by DRDO, SRMIST, and won most innovative solution award in DRDO Robotics and Unmanned Systems 2018. [Paper](#)
- Best in Technical Design Award in AUVSI Student Unmanned Aerial System 2019 held in Patuxent River Naval Airbase, MD, USA. [Report](#)
- Medical Express Outback Challenge (2018): Shortlisted in the top 20 of 564 teams to compete in MedEx UAV Challenge, Australia 2018.