

## PROFILE

Software Engineer with 3+ years of experience in database administration, data analysis, software development and Machine Learning. Proven track record of delivering high-quality software solutions in a production environment for 30+ clients over my career.

## WORK EXPERIENCE

### Full Stack Software Engineer

06/23 - Present

CentrAlert, Charlotte, NC

- Engineered a high-performance backend system for the KnowNow! emergency communications app, serving 100,000 active users, using .Net C#, Python, and SQL Server. Architected REST and GraphQL APIs to facilitate efficient data exchange and integration within the application's backend.
- Spearheaded the creation of a collaborative filter-based recommender engine that analyzed 500,000 data points, integrating 30+ features, which enhanced user engagement with personalized content, leading to a 25% increase in user interaction.
- Implemented a cross-platform frontend architecture using Flutter, resulting in a cohesive and responsive user interface that elevated user engagement across web and mobile platforms.

### Software Engineering Intern

05/22 - 08/22

CAMP Systems International, Merrimack, NH

- Designed a unified Multi-Factor Authentication mechanism with Identity Server and OAuth2.0 for the CAMP Engine Maintenance suite of applications (REST API) leading to Enhanced Layer of security, and 60 % reduction in Client authentication problems and security bottlenecks.
- Optimized application-data mapping with Entity Framework and PostgreSQL, and utilized AWS S3 for robust object storage, significantly enhancing horizontal scalability to handle increased user load efficiently.
- Performed robust unit tests with XUnit, resulting in 40% decrease in critical production issues and significantly elevated system stability.

### Peer Tutor, Data Science

10/21 - 01/22

University of Massachusetts at Lowell, Lowell, MA

- Tutored graduate students for Data Science for Biologist BIOL.4072 graduate level course.
- Presented and explained concepts pertinent to Data Science, Machine Learning, and their practical application in the field of Molecular Biology.
- Designed ML/ Data Science (Scikit Learn, PyTorch, TensorFlow) Learning Material for 30 + graduate students.

### Assistant Systems Engineer

07/19 - 07/21

Tata Consultancy Services, Hyderabad, India

- Efficiently managed and maintained Oracle/SQL databases in various environments, reducing downtime by 20% and improving overall system performance.
- Automated the design and construction of Enterprise Cloud (EC) databases using Python, C++, and Shell Scripting, which led to a 30% increase in process efficiency.
- Led the successful migration of 500+ Test and Production Databases from Legacy Servers to the Oracle Cloud architecture, cutting operational costs by 15% and enhancing system reliability.

## SKILLS

Python, React JS, C++, C Programming, HTML, CSS, Node JS, SQL (Oracle SQL, PostgreSQL, MySQL), NoSQL (Mongo DB, Cassandra DB), C#, .NET Core, Java, JavaScript, AWS, Docker, Kubernetes, Git, MapReduce, Hadoop, Machine Learning, Natural Language Processing, Shell Scripting, Kafka, Azure DevOps, ETL, Jira, Agile Methodologies.

## EDUCATION

### Master of Science in Computer Science

08/21 - 05/23

University of Massachusetts Lowell (UMass Lowell), Lowell, MA

- Relevant Coursework: Algorithms, Natural Language Processing, Internet and Web Systems, Deep Learning

### Bachelor of Technology in Electronics and Communications Engineering

07/15 - 05/19

SreeNidhi Institute of Science and Technology (SNIST), Hyderabad, India.

## PROJECTS

### Cryptocurrency Portfolio Application

10/22 - 12/22

- Developed a Python-Flask backend for a cryptocurrency portfolio dashboard, enabling real-time asset tracking and management of 30+ cryptocurrencies, with React JS-based visualization tools.
- Applied a sophisticated LSTM Recurrent Neural Network to model and forecast cryptocurrency trends, delivering a robust 93% prediction accuracy on market prices and empowering users with strategic insights for asset allocation and risk assessment.
- The Web Application can be found at [this](#) link.

### Image Fusion using Computer Vision

12/18 - 05/19

- Collaborated in a team of three to develop a deep learning GUI using MATLAB and Python with Django, that synthesized spatial features from dual input images to enhance image definition.
- Implemented VGG Deep Learning framework-based algorithm to accentuate salient features in the fused image output, achieving an 80% improvement in image definition and quality.