

Hrithik Puppala

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EDUCATION

- **San Jose State University** California, United States
Masters of Science in Computer Software Engineering; Specialization: Data Science *August 2023 - Present*
- **Indian Institute of Information Technology** Sricity, India
Bachelor of Technology in Computer Science; CGPA: 3.56 *August 2017 - June 2021*

SKILLS SUMMARY

- **Languages & Cloud:** GoLang, Python, Java, C/C++, R, SQL, MATLAB, AWS (EC2, S3, Lambda), Azure, GCP
- **Machine Learning & Data Science Tools:** TensorFlow, Keras, PyTorch, scikit-learn, Pandas, NumPy, SciPy, Matplotlib
- **Databases & Big Data Technologies:** MySQL, PostgreSQL, Firebase, Apache Spark, Hadoop, Kafka
- **Frameworks & Tools:** Flask, Django, Spring Boot, KrakenD, NodeJS, ReactJS, Angular 8, Git, Docker, Jenkins, JIRA

EXPERIENCE

- **INDmoney** Gurgaon, India
Software Development Engineer; Focus: Machine Learning *May 2022 - August 2023*
 - **Machine Learning Integration:** Implemented machine learning algorithms for predictive analytics in financial services, enhancing investment insights and decision-making accuracy.
 - **Big Data Processing:** Managed large-scale data processing using Kafka, PostgreSQL, and Docker, focusing on scalability and performance optimization for 1M+ users.
- **Cyware Labs** Bangalore, India
Software Engineer *June 2021 - May 2022*
 - **Driving Scalability and Performance:** Orchestrated seamless transition from **Monolithic-to-Microservice**, resulting in 40% improvement in system scalability and managed **Docker images** in AWS for improved web server performance.
 - **Test Coverage:** Spearheaded the creation of a robust **Integration Testing Framework**, integral to all services. This framework effectively forecasts end-to-end application flows, ensuring comprehensive testing.
 - **Automation Tools:** Automated several routine processes, improving operational efficiency and reducing manual errors.
- **SQUPUS Solutions** Hyderabad, India
Machine Learning Intern *June 2020 - July 2020*
 - **Development:** Used **Computer Vision** Algorithms and Classified the GTSRB dataset to maintain higher accuracies.
 - **Data Analytics:** Worked on **improvement of 33%** in the F1-score of cross-validation and Conducted comprehensive data analysis to identify trends and patterns, providing valuable insights for business strategies.

ACADEMIC PROJECTS

- **Telugu Text Summarization using Deep Learning:** Developed a model for summarizing Telugu text articles using NLP and deep learning techniques, employing **transformers** for accurate results. **Pre-processing:** Tokenization, Stemming.
- **Advanced Statistical Models:** Implemented **Monte Carlo Simulation**, **Metropolis Hasting**, **Metropolis, Rejection Sampling**, **Monte Carlo Markov Chain** on Axis Bank Dataset.

PUBLICATIONS

- Design and analysis of Generative Adversarial Networks for time series data augmentation in **International Journal of All Research Education and Scientific Methods (IJARESM) Volume 9 Issue 11**

RESEARCH PROJECTS

- **Autonomous Drone Path Finder:** We've captured terrain information using LIDAR sensors and developed a model on top of it which launches a group of drones for parallel search using **Proximal Policy Optimization** Algorithm. We were able to generate a virtual map with the best path to the destination. **Tech:** Unity 3D, C# [Guide: Dr. Himangshu Sarma]

ACCOMPLISHMENTS

- **Teaching Assistant - Applied Software Engineering Course, IIIT Sricity:** Improved student satisfaction by clarifying complex software engineering concepts, with an emphasis on algorithmic and machine learning approaches.
- **Coordinator - Data Science Club, IIIT Sricity:** Organized talks and workshops on machine learning and data science, enhancing peer learning and knowledge exchange.