# Ria R Kulkarni

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# **Education**

PES University, B. Tech in Computer Science and Engineering

Dec 2021 - May 2025

• CGPA: 8.43/10 | 5x Recipient of the Distinction Award Scholarship | Awarded Prof. CNR Rao Scholarship

BASE PU College, Grade XI - XII

June 2019 - Aug 2021

• Percentage: 100% (II PUC)

Venus International School, Grade I - X

June 2009 - Mar 2019

• Percentage: 97.2% (ICSE)

# **Experience**

#### Teaching Assistant, PES University

Jul 2024 – Present

- Assisted professors in teaching Software Engineering and Web Technologies
- Created educational materials, including slide decks, problem statements and notes, while also evaluating assignments and projects

Intern, ALTEN Calsoft Labs (ACL Digital) - Bangalore

May 2024 – Jul 2024

- Led a Generative AI project from inception to deployment, overseeing timelines and deliverables, leading to a 30% reduction in manual customer service tasks
- Applied cutting-edge technologies like RAG, open-source LLMs and AWS EC2, resulting in seamless deployment and cloud migration

Research Intern, Centre for Data Science & Applied Machine Learning

Jun 2023 - Aug 2023

- Conducted extensive research and applied various traditional and Deep Learning techniques for detecting image forgery
- Implemented Vision Transformers for Deepfake Detection and co-authored a draft research paper

#### **Projects**

#### • Dialogue - Web Chat

github/Dialogue

Designed a real-time chat application using the MERN stack, Redux hooks and socket programming, enhancing interaction speeds.

#### • Task Management with Raft Consensus Algorithm

github/TaskApp

Implemented it for fault-tolerant distributed systems (Raft Consensus) with StreamlitUI and MySQL, achieving high consistency across nodes.

#### • Bus Reservation System

github/busReserve

Built a Spring Boot MVC-based bus reservation system following SOLID and GRASP principles, enhancing code maintainability.

• Travela github/Travela

Crafted an LLM-powered one-stop shop for flight and cab transfer offers in an 8-hour hackathon; led the team presentation and engineered the SQL/Llama3.1 backend.

### • Multi-Event Anomaly Detection for Enhanced Video Surveillance

Present

Leading a team of 4 and innovating a robust, multimodal violence/vandalism/abandoned object detection model and co-authoring a research paper based on our findings

# • Accenture North America Data Analytics and Visualization Job Simulation

Aug 2024

Analyzed and modelled large datasets to complete a simulation advising a hypothetical social media client

# **Skills**

- Coursework: Data Structures, Statistics for Data Science, Operating Systems, Computer Networks, DBMS, Data Analytics, Software Engineering, Machine Intelligence, Cloud Computing, Object-oriented Analysis & Design
- Languages: Python, R, Java, C/C++, SQL, JavaScript, HTML/CSS, MATLAB
- Frameworks: React, MERN Stack, Spring-Boot MVC, Node.js, StreamlitUI, Langchain, HuggingFace Transformers, Ollama, LMStudio
- Cloud/Databases/Containerization: AWS, MongoDB, MySQL (phpMyAdmin), RDBMS, Neo4j, Docker, Kubernetes

# **Certifications**

- Machine Learning Specialization, DeepLearning.AI: Coursera
- Jira Work Management Fundamentals: Atlassian
- Linux Kernel Development: The Linux Foundation
- Cloud Computing 101: AWS Educate

# **Co-Curriculars & Interests**

- Avid reader with a strong interest in creative and technical writing, contributing regularly to various platforms
- Active member of writing club WriteAngle; collaborated on editorial projects monthly college newsletter
- Learning French (B2) and German (A2) to enhance communication and cultural awareness