Uday Jartarghar

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GitHub Portfolio Coding

EDUCATION

KLE Technological University, Hubballi

2022-2025

B.E, Computer Science - AI

CGPA: 9.12

• JSS K.H.K Institute of Engineering, Dharwad

2019-2022

 $Diploma\ in\ Computer\ Science\ and\ Engineering$

Percentage: 76.67

• Shree Mahaveer School, Hubballi

2008-2019

Class X

Percentage: 84.64

EXPERIENCE

Knit Space

Jan 2024 - Jun 2024

Project Intern - Machine Thinking

www.knitarena.com

- Generated a relation graph by applying a combinatorial explosion-like algorithm based on Hamming similarity
- $\ Constructed \ a \ knowledge \ path \ from \ the \ generated \ premises \ using \ a \ \textbf{DFS} \ with \ a \ backtracking-like \ algorithm.$
- Formed abstraction of the path as central nodes of the **community structure** with **Girvan's Newman** algorithm

• Maiti Labs

Dec 2023 - May 2024

Software Engineering Intern at start-up fostering Climate Action

www.maitilabs.org

- Developed a Full-text search feature for the awareness portal, created forms for blog posts, validation with Yup.
- Scraped news articles, processed them using the **PaLM API**, stored the results in **JSON** format.
- Led a team of **five** in researching image compression using deep learning techniques for image modality.
- Worked on time series analysis using ARIMA and SARIMAX models on analyzing climate data.

ACHIEVEMENTS

- Ranked among the Top 10 teams in the Karnataka State Police 2024 Hackathon, competing 100+ teams.
- Achieved a rank of 242 in the highly competitive D-CET examination, conducted across Karnataka
- Solved 450+ problems, contest rating of 2018 as specialist at coding ninjas, 3* at codechef

PROJECTS

Loan Management System

Feb 2024 - Mar 2024

 $https://github.com/ud4yy/LoanManagement_System.git$

- Tools & technologies used: SpringBoot, MySQL, SMTP, JWT, OpenPDF, Postman, GitHub
- Developed 10+ RESTful APIs to manage loan applications, transactions, and repayments efficiently.
- Implemented user authentication and authorization using Spring Security and **JWT** for secure access to APIs.
- Engineered **PDF generation** of transaction statements using OpenPDF, enabling users to download reports.
- Integrated SMTP for **real-time email notifications**, informing users of loan application status (approval/rejection).
- Conducted API testing and validation with **Postman**, ensuring robustness and reliability of the service.

Accident Detection System with Vision Transformer

Dec 2023 - Jan 2024

 $Novel\ accident\ detection\ framework:\ https://github.com/ud4yy/ViT-AccidentDetection.git$

- Developed state-of-art framework for accurate accident detections with reduced false positives.
- Follows a multi-layered approach, employing YOLOv8, ByteTrack for accurate vehicle detection and tracking.
- Designed an algorithm to detect abrupt changes in vehicle movements, classified using Vision Transformer (ViT).
- Achieved state-of-art results having **detection rate of 94.4%** with a **False Alarm Rate** of 0.00631%.
- Extended this work into Karnataka State Police 2024 Hackathon, incorporating accident detection, a rapid notification system, and interactive data analytics for accidents and police data.
- Publication: 300+ Reads | https://dx.doi.org/10.21203/rs.3.rs-3903862/v1

SKILLS

Languages: C, C++, Java, Python, SQL

Subjects: Operating System, DBMS, Computer Networks, Data Structures and Algorithms, Deep Learning

Frameworks and Tools: Reactjs, Spring Boot, GitHub, MySQL, MongoDB, AWS, Docker

Soft Skills: Leadership, Teamwork, Problem Solving, Time Management

COURSES AND CERTIFICATIONS

• Git Essential Training

Machine Learning Specialization - deeplearning.ai

• Juniper Networks Certified Associate - (JNCIA-Junos)

Linux Unhatched - Cisco Academy