

# Riyanshi Goyal

+91-9783346866 | riyanshigoyal@iitbhilai.ac.in | LinkedIn | Github

## EXPERIENCE

### Software Engineer 1

MAQ Software

July 2024 – Present

Noida, Uttar Pradesh

- Constructed Azure Synapse Pipelines to facilitate the seamless transfer of data from on-premises data systems to Azure Data Lake Storage.
- Worked on PySpark Notebooks, Microsoft Fabric Created insightful data visualization reports with Power BI.

### Research Intern

TCS

May 2023 – July 2023

Remote

- Conducted in-depth analysis of large language models, specifically ChatGPT, on various mental health datasets sourced from Reddit and proposed different prompting strategies and fine-tuning to increase the accuracy of automated mental health analysis tasks by 20.
- Applied natural language processing techniques like topic modeling using LDA and K-means clustering, to enhance the performance and accuracy of the system.

## EDUCATION

### Indian Institute of Technology, Bhilai (CGPA - 8.57)

Bachelor of Technology in Computer Science and Engineering

Bhilai, India

Nov. 2020 - May 2024

## PROJECTS

### Campus Delivery System | Reactjs, Nodejs, Firebase, MongoDB, Docker, Python, Redis Cache, Git

[GitHub](#) [Website Link](#)

Jan 2024 - Feb 2023

- Developed a comprehensive full-stack food delivery service as a component of the Computer System Design course as a group project.
- Deployed a microservice architecture along with optimizations like caching and load balancing, to enhance performance and scalability.
- Integrated features including chatbot and recommendation system to enhance user experience.

### Tic-Tac-Toe Multi-Agent Reinforcement Learning | Python, RL, Numpy, Tkinter

[GitHub](#)

Nov 2023

- Implemented a Tic Tac Toe game with using Q-learning and MCTS algorithms for adaptive gameplay.
- Developed an intuitive user interface for human-computer interaction.

### Query Chatbot | Python, TensorFlow, NLTK, NumPy, Keras, Tkinter

[GitHub](#)

Nov 2023

- Developed an interactive query chatbot using NLP, enabling users to ask questions and receive accurate responses.
- Integrated the chatbot with a comprehensive database for a wide range of query handling.

### Diabetic Retinopathy Detection | Python, TensorFlow, CNN, Keras

[GitHub](#)

Nov 2022

- Implemented a Machine Learning algorithm to automate the detection and grading of diabetic retinopathy and diabetic macular edema using retinal fundus images.
- Utilized Convolutional Neural Networks as the foundation of the proposed model and achieved successful results, demonstrating the potential for the model to assist in the early diagnosis and treatment of diabetic eye diseases.

## EXTRACURRICULAR

Mentor - Student Mentorship Program

Part of Web Development Team – Meraz'22 - Techno Cultural Fest of IIT Bhilai

Core member of the Dance Club, IIT Bhilai and participated in the Inter-IIT Cultural Meet 2022, representing IIT Bhilai in group dance.

Volkswagen i.mobilathon 3.0 – Pre Final round.

## TECHNICAL SKILLS

**Languages:** C++, Python, SQL, JavaScript, HTML, CSS

**Developer Tools:** Git, Linux, Shell Scripting, Latex

**Databases:** MongoDB, MySQL

**Frameworks and Libraries:** React.js, NodeJS, Express.js, NLTK, Numpy, Pandas

## COURSE WORK

- Data Structures and Algorithms
- ML and NLP
- Computer System Design
- Computer Networks
- Operating Systems
- DBMS