# Abhishek Singh Kushwaha

# EDUCATION

• IIT Bhilai: B.Tech, Data Science & Artificial Intelligence

Bhilai, Chhattisgarh

• Modern Vidya Niketan: CBSE Board, Class XII: 94%

Haryana, India

• Vidya Mandir Public School: CBSE Board, Class X: 94.3%

Haryana, India

#### EXPERIENCE

## Member at Meshery Community, CNCF

Jan'24 - Present

Distinguished among 5,000+ Meshery contributors, secured one of 250 member positions. Delivered 4+ pull requests, 2 reviews, and a critical functionality in 3 weeks. Quickly learned Go and Jekyll, showcasing adaptability. Recognized by maintainers for impactful contributions, highlighting commitment to Meshery's progress.

# Software Developer Intern at NETR.AI &

June'22 - November'22

Collaboratively developed VR application for peripheral vision testing, leveraging C#, Unity, and Python, achieving 60% testing cost reduction and 90% machine cost decrease. Proficient in algorithm development and integration.

# OpenLake Mentor IIT Bhilai 🔗

May'22 - May'23

Organised web development workshop, led hackathon, and inspired 100+ IIT Bhilai students through engaging sessions.

#### SKILLS SUMMARY

• Languages: Python, Go, C++, JavaScript, Latex, Bash Scripting

Frameworks: TensorFlow, PyTorch, Langchain, React, Node, Express, Bootstrap, Tailwind, Flask
 Tools: AWS, Docker, MongoDB, PostgreSQL, Firebase, Git, GitHub, Kafka, Nginx, Hadoop

• Technical Skills: Machine Learning, Data Analysis & Visualisation, Deep Learning, Computer Vision, Web Development,

Competitive Programming (Leetcode rating: 1526 (highest)) • OOPS, Computer Networks, DBMS, DSA

• Soft Skills: Problem Solving, Analytical Thinking, Fast Learning, Team Management, Time Management

#### PROJECTS

### Reverse-Chain 🖸

- Developed and implemented the Reverse Chain algorithm, as proposed in the paper "Reverse Chain: A Generic-Rule for LLMs to Master Multi-API Planning," to enhance the capabilities of Large Language Models (LLMs) in multi-API planning scenarios.
- Leveraged technologies such as langchain, FAISS for retrieval, BERT embeddings from Hugging Face, and OpenAI API to orchestrate the end-to-end workflow, ensuring efficient and accurate planning across diverse application programming interfaces (APIs).

#### SoreTrek 🖸 🗈

- Innovated an efficient inventory and sales management system with a user-friendly interface, leveraging visual data analytics for tracking sales, purchases, and inventory in real-time enhancing productivity.
- Utilized Firebase (authentication) and Firestore (NoSQL database) for enhanced security and scalability. Implemented React hooks and Tailwind CSS for dynamic and visually appealing UI.

## CloudPhyisician 🖸

- Created an innovative workflow utilizing CCTV footage to extract vital information from patient monitors, optimizing nurse-to-patient ratio and cost efficiency.
- Integrated advanced technologies, including digital image processing, self-trained YOLO for segmentation, classifiers, and optical character recognition for accurate vital extraction. Used advanced concepts like, Threading, Data Structures & Algorithms to speed up the process.

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- Python based image clustering project using face-recognition library, backed by C++ dlib library, to efficiently group images using the facial embeddings from the reference images.
- Facilitating accurate identification and labeling of all relevant images featuring the same individual.

# Honors and Awards

• Mentee at Amazon ML School &

November'23

• Runner-up at the "iHack 2022" hackathon  ${\mathfrak G}$  challenge on Automatic Image Clustering, organized by IIT Bhilai, IBITF, and Infineon Technologies as part of a three-member team.

October'22

## Position of Responsibility

• Coordinator of Data Science & Artificial Intelligence Club, IIT Bhilai

May'23 - Present

• Team Head of DSAI Website Development Team, IIT Bhilai

July'23 - Present