

Tirath Bhathawala

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EDUCATION

SVKM's Dwarkadas J. Sanghvi College of Engineering <i>B.Tech in Computer Engineering: CGPA: 9.23</i>	Mumbai, India 2022 - 2026
Mumbai Junior College of Arts, Commerce and Science <i>HSC (12th Boards - 91.5%, MHTCET - 99.5%)</i>	Mumbai, India 2019 - 2021
IES Orion <i>ICSE (10th Boards - 96.8%)</i>	Mumbai, India 2009 - 2019

EXPERIENCE

DJS SYNAPSE (September 2023 - Current)

- Actively participated in the development and enhancement of Machine Learning skills, particularly Computer Vision, through practical projects and hands-on experience
- Working on a research paper in music generation leading to strong academic writing and information literacy skills

PROJECTS

ML and CV Fundamentals | *tensorflow, keras, pandas*

- Implemented deep learning models for medical image segmentation using the RSNA Breast Cancer dataset (pydicom, torchvision)
- Developed computer vision algorithms for object detection and image classification (CNN) (Oxford-IIIT Pet, MNIST, CIFAR10)
- Implemented machine learning models such as Decision Tree Classifier, Random Forest, Bagging & Boosting (Titanic Dataset)
- Developed a YouTube thumbnail sentiment analyzer (selenium, fastapi, streamlit, huggingface)

RakshakRita | *BERT, nltk, seaborn, matplotlib, networkx, plotly*

- RakshakRita is a QR-based Police Feedback System, empowering citizens to voice their opinions on policing
- Implemented NLP tasks like language translation, zero-shot classification, spam detection, chatbot creation and sentiment analysis. Crafted dynamic feedback reports on police stations using interactive heatmaps

Nomework | *FontForge, TesseractOCR, Gemini*

- Transform prompts into handwritten masterpieces with Nomework's AI-powered assignment generator
- Harnessed the power of TesseractOCR to digitally transcribe a handwritten document and employed FontForge to successfully extract custom font from a handwritten image. Leveraged Gemini to create assignment content

Optima | *OpenCV*

- Optima revolutionizes healthcare by offering real-time detection and analysis of human posture and actions, specifically targeting asthma pump usage, to provide precise insights into patient behavior and enhance treatment outcomes
- Spearheaded the development of precise features such as posture detection, shake tracking, pump-to-face distance measurement, and personalized treatment insights, enhancing healthcare monitoring and patient engagement

TECHNICAL SKILLS

Programming Languages: C/C++, Python, Java, HTML/CSS, JavaScript, SQL, React

Tools: Linux, Git, Kaggle, Google Colab

Frameworks/Technologies: Streamlit, Tensorflow, Keras, OpenCV, LangChain, PyTorch, NLTK

Relevant Coursework: Data Structures, Analysis of Algorithms, Database Management System, Operating System, OOPS

Course Certifications: [CS50P by Harvard University \(Online\)](#), [The Odin Project](#)

ACHIEVEMENTS

Winner in CodeBounty, a college competitive programming contest

Finalist in the Rajasthan Police Hackathon 2024 (ML Lead)

Finalist in the Gujarat G20 Summit Hackathon 2023 (ML Lead)

Coding Profiles: [CodeChef](#) [LeetCode](#) [HackerRank](#)