SAMARTH MANDAGERE NARAHARI

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EDUCATION

BNM Institute of Technology (Visvesvaraya Technological University)

2021-2025

Bachelor of Technology (Computer Science and Engineering) Bengaluru CGPA: 9.45 (up to sixth semester)

INTERNSHIP

Lost Stories

June 2024 - Present

AI Developer Intern

- Working as an AI Intern at a start-up for the app Lost Stories
- Responsible for building a suggestions model, file classification model and Integrity check
- Developed models using Naïve Bayes Classifier and KNN Classifier and Developed a Creators website

Vidatt. Data Analytics Private Limited

September – December 2023

Front End Developer Intern

- Spearheaded the implementation of interactive features and dynamic gradients to enhance user interaction on the official
- Contributed more than 1000 lines of code for the website both in CSS and JavaScript
- Verified the integrity of React hooks, ensuring efficient performance throughout development phases

Samsung Prism June – December 2023

AI Intern

- Developed AI models in Python, using OpenCV | Skimage for precise border matching and image processing
- Conducted comprehensive image matching, to compare with camera capture by varying the Threshold
- Eliminated the human error, obtained results that only 90% of the images were matching precisely
- Co-ordinated with the team, as a leader and presented it to the Samsung board

Contriver October – November 2023

Full stack with ML & AI

- Developed multiple front-end interfaces using WordPress
- Created two projects on age and gender detection and face mask recognition utilizing Python libraries
- Spearheaded front-end development using WordPress, ensuring responsive and user-friendly designs
- Engineered and implemented age and gender detection models, achieving over 95% accuracy using Keras from TensorFlow
- Developed a face mask recognition system with 98% accuracy, optimizing model performance through advanced image processing techniques

PROJECTS

AutoMail AI June – August 2024

- Developed a Django app for voice-commanded email prediction, boosting accuracy by 25%
- Enhanced model training performance by 30% through data analysis and visualization
- Conducted statistical analysis and visualized data patterns, contributing to a 30% enhancement in model training Performance

Automated Number Plate Recognition

July – August 2024

- Integrated python libraries for Object identification, Greyscaling, Finding Abs-Difference and Text Extraction
- Optimized the model by using Pytesseract over Keras as it showed 20% more accuracy for Text Extraction
- Obtained an accuracy of 82% in detecting the number plate for a dataset of 1000+ vehicles
- Certified by Smart India Hackathon for the problem statement of Text and Number Detection

Indian Sign Language Recognition

June – July 2024

- Developed a gesture recognition system for Indian Sign Language using Python libraries and machine learning techniques
- Enhanced model accuracy by integrating advanced image processing methods and optimizing parameters for better recognition
- Secured certification from IBM EcoEquify 2024 Hackathon for innovative solutions using GenAI by implementing GAN

Template Matching (Samsung)

June – December 2023

- Created a template matching project using python libraries OpenCV, Thresholding and PIL
- Compared the accuracy of captured photos with the displayed photos in the camera capture interface
- Improved the accuracy of the template matching and finding differences by tweaking the thresholds for different pictures in different light settings around 150-500 values

StockOPorto

September – October 2023

- Created Django app for stock analysis, prediction, user login and portfolio management with SQLite
- Implemented logistic and linear regression models for market trend analysis with three years of stock
- Improved stock prediction accuracy from 40-55% to more than 70% by varying the timeline and epochs

PAPER PRESENTATIONS/RESEARCH PUBLICATIONS

Smart ANPR: A Checkpoint-Based Toll and Parking Management System Using Hybrid OCR and November 2024 Blockchain

ICIITCEE 2025

- Objective: Exploiting the available services of YoloV8 to build a model to extract vehicle plate with blockchain technology for faster gateway payments
- The paper discusses about the integration of OpenCV, Tesseract OCR with efficient YoloV8 for the implementation of project
- Currently under review for publication, highlighting its relevance in image processing and automated vehicle identification

Automail AI: Intelligent Voice-Controlled Email Generator

November 2024

- ICIITCEE 2025
 - Objective: Exploiting the available services of SpeechRecognition, Machine Learning, SMTP and gTTS to build a voice activated bot to generate emails based on user's specific voice input
 - The paper discusses about the integration of Machine Learning for a large formal and informal emails dataset, used to generate mails and send it to the specified user
 - Currently working on the research paper, based on our own implementation idea

Indian Sign Language Recognition: A Systematic Review of Various Implementations using deep learning **Models** November 2024

ICCEECS 2024

- Objective: To analyse the existing research on Indian Sign Language (ISL) recognition using deep neural networks and their practical applications
- A thorough study on how Generative AI might be used, with a specific focus on Generative Adversarial Networks (GANs) for increasing dataset, to boost the accuracy and robustness of ISL recognition systems
- The paper summarizes about how the current implementations can be improved making use of Generative AI

WORKSHOPS

Leadership Course, Harvard Square

- February 2024
- Artificial intelligence & Cybersecurity, Marvville University, BNMIT
- February 2024

Artificial Intelligence & Web Development, IBM

MongoDB, Appteknow Careers, BNMIT
AWS, Brain O Vision, BNMIT, Held at Seminar Hall, BNMIT
Arduino, SST, BNMIT
Visual Graphics in C, Great Learning
Multimedia and Java Course, BNMIT
March 2023
October 2022
October 2022

EXTRACURRICULAR

- Selected as top three for Samsung Prism Internship
- Awarded the Best Intern certificate from Contriver Company
- Core Member, NSS, BNMIT

2021 - 2025

- Graded as the Elite 20 among all the students of BNMIT 2025
- Part of Super Sixty students of the college which is meant for inter and intrapersonal skills 2023 2024
- Attended a one day MongoDB meetup
- Organized Valorant Tournament in College two times
- Organized Polaroid photo booth in College Tatva fest

2024

- Attended OLA Sankalp Future Factory Opening as a Tech Enthusiast
- Stood Fourth in BNM Interdepartmental Sports-Carrom Competition
- Two time Second place in BNM Interdepartmental Sports-Badminton Competition
- Two time second place in Valorant tournament in BNMT, Third place in SJBIT Intercollege
- Placed third in PUBG tournament in online Esports Challenge India
- Member of the IEEE-CSE

May 2023 - May 2024

- Third place in IEEE Technical and Non-Technical Quiz
- Joined the Sponsorship Team, Tatva, BNMIT

2024

Team Vice Captain, BNMIT Badminton Team, BNMIT

2022 - 2023

Awarded the first prize in Java Hackathon of BNMIT

2023

- Core Volunteer, Science Exhibition, BNMIT
- Won the first prize for Innovative Thinking in ANVESHAN Prodathon, BNMIT

2021

• Selected as a finalist among 25 teams out of 170 teams in IBM EcoEquify Hackathon

COMMUNITY SERVICE

- Participant in a Cycle Street event raising environmental awareness through cycling
- Taught Math and Science to class seven students and celebrated functions in government schools
- Distributed books, pens and stationary for the financially critical and government schools students
- Organized Sports tournament and distributed prizes along with chocolates and increased awareness about physical and mental health
- Visited Orphanages, conducted social interactions and distributed meals and essentials
- Blood Donor donated blood twice for community service Lion's Club, Ramaiah Memorial
- Participant, in International Yoga Day, promoting yoga awareness
- Participant, Bharat Walk, BNMIT, celebrating India's 76th and 77th Independence Day Celebration

TECHNICAL SKILLS

- **Programming Language:** C, C++, Python, Java, MySQL, JavaScript, HTML/CSS, Assembly, TCL, MongoDB, latex, Arduino
- Operating System: Windows, UNIX, Android and IOS
- Microsoft Office Package: Word, Excel, Access, PowerPoint
- Frameworks: React, Node.js, Django, WordPress, Flask
- Libraries: Pandas, NumPy, Matplotlib, OpenCV, Skimage, PIL, Pytesseract, Keras
- Services: Salesforce Administrator, AWS, Microsoft Azure, Power BI, UiPath, Automation Anywhere
- **Soft Skills:** Leadership, Team Player, Problem-Solving, Creative & Dritical Thinker, Time Management