

Yash Rajabhau Vibhute

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EDUCATION

Master of Science in Computer Science, Indiana University Bloomington <i>Luddy School of Informatics, Computing, and Engineering (GPA: 3.9/4)</i>	08/2022 - 05/2024 Indiana, USA
Bachelor of Engineering in Computer Engineering, Savitribai Phule Pune University <i>Pimpri Chinchwad College of Engineering, Pune (CGPA: 9.44/10)</i>	06/2018 - 05/2022 Pune, India

WORK EXPERIENCE

Data Scientist , Project 990 Inc. <ul style="list-style-type: none">Coordinated data extraction and analysis for Project990, utilizing natural language processing techniques to map the U.S. nonprofit sector's funding landscape from 2011 to 2021.Leveraged supercomputers like BigRed200 to process and analyze vast datasets, contributing to the development of a comprehensive foundation-grantee network.	02/2024 - Present Indiana, USA
Associate Instructor , Indiana University Bloomington <ul style="list-style-type: none">Aided professors to deliver 60+ engaging lectures, lab sessions and facilitate 30+ discussions on Applied Machine Learning, Data Mining and Big Data, and Software Engineering Courses, reaching 400+ students.Advised complete academic assistance, including individualized guidance, review/grading sessions, and assignment marking, to enable students to achieve academic excellence.	08/2022 - 05/2024 Indiana, USA
Software Engineer Intern (<i>Full Stack Web Developer</i>), Sadhichi Wear Pvt. Ltd. <ul style="list-style-type: none">Developed interactive web apps using ReactJS & NodeJS, ensuring seamless data management with SQL & Firebase.Coordinated with senior engineers to enhance performance, resulting in a 30% increase in total application speed.Performed web-based automated testing with Selenium, achieving a 95% test coverage.	02/2021 - 01/2022 Pune, India

PUBLICATIONS

Brain Tumor Image Enhancement Using Blending of Contrast Enhancement Techniques <ul style="list-style-type: none">Innovated a unique approach for enhancing brain tumor MRI images, blending state-of-the-art algorithms including BBHE, DSIHE, CLAHE, RESIHE, and MSRCR evaluated on factors like NIQE, PIQE, BRISQUE and Entropy.Achieved significant success with the CLAHE + MSRCR combination, resulting in superior image enhancement and enhanced tumor visibility, as evidenced by a BRISQUE value of 29.805718	05/2022 (<i>Springer – 3rd ICIPCN 22</i>)
Empirical Study of Early Breast Cancer Detection using Machine Learning Techniques <ul style="list-style-type: none">Conducted a comprehensive review on early breast cancer detection techniques, while focusing on the effectiveness of machine learning prediction algorithms such as Support Vector Machine, Fuzzy C-Means, Random Forest, Decision Tree, Naive Bayes, and Deep Learning Algorithms (Convolutional Neural Network), utilizing the Wisconsin feature based dataset for experimentation based on K-Fold Cross Validation methods with an overall accuracy rate of 95.61%	07/2021 (<i>Springer- 3rd ICIACS 21</i>)

PROJECTS

BeatBuddy (Music Recommendation System) <ul style="list-style-type: none">Incorporated PRAW, BeautifulSoup, and APIs from Spotify, Twitter, and Last.fm for data scraping, performed data analysis by cleaning and processing the gathered data ranging around 100k+ rows and 20 features.On processed data, implemented sentiment analysis by Natural Language Processing, content-based filtering (cosine similarity) & hosted on AWS EC2, utilizing K-means for efficient grouping of music items based on user behavior.	05/2023
Psychological Disorder Predictor and Consultor (Disorder Prediction and Consulting System) <ul style="list-style-type: none">Achieved an 89% accuracy rate in predicting disorders by formulating a binary dataset and employing advanced machine learning models (Random Forest, Decision Tree).Incepted a Tkinter-based software tool for symptom analysis and doctor recommendations, enhancing healthcare accessibility.	04/2023
Smart Wastewater Reclamation (Wastewater Treatment Plant Management System) <ul style="list-style-type: none">Led a 5-member team, aiming for a 60% reduction in reliance on government oversight and facilitating real-time monitoring and management of wastewater quality by hosting the system online using Streamlit and Firebase.Engineered a binary data representation and employed machine learning algorithms such as random forest and decision trees to predict wastewater purity with 90.6% accuracy.	07/2021
HanabiYuga (Event Management System) <ul style="list-style-type: none">Spearheaded a team of 4 to create an event management app by Agile method, allowing users to search and book events.Executed tools for hosts to oversee events and chat functionality, resulting in a 20% increase in user engagement.Incorporated SMTP for notifications and leveraged OAuth to guarantee ironclad security during authentication.	11/2020

AWARDS

Winner (<i>OnCampus Level</i>), Finalist , IdeaIn10 Presentation Competition Round (Pune), United Kingdom for Smart Wastewater Reclamation	12/2021
Finalist , Tech Infusion Grand Challenge , Australia for Smart Wastewater Reclamation	09/2021

SKILLS

- Programming Languages:** C (OOP), C++, Python, Java, R Programming (Basics)
- Web Technologies:** HTML, CSS, ReactJS, JavaScript, jQuery, Bootstrap, XML
- Database:** RDBMS, MySQL, MongoDB, Firebase, Neo4j, PHP
- Additional:** Android Studios, Matlab, Flask, Docker, RESTful APIs, Apache, AWS, EC2, Git, JIRA, Azure, Postman, Statistics