

BHARATH KUMAR RAJESH

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EDUCATION

Pace University, Seidenberg School of Computer Science and Information Systems
Master of Science (MS) in Computer Science | **Concentration:** Machine learning

New York, NY
May 2026

Jyothy Institute of Technology

Bachelor of Engineering in Computer Science | **Concentration:** Machine Learning

Bangalore, India
May 2024

TECHNICAL SKILLS

Programming Languages: Python, SQL, Java, C++

Database Management: MySQL, MongoDB, PostgreSQL, SQLite

Software / Tools: TensorFlow, PyTorch, Scikit-learn, Jupyter, Git, Docker

Research Focus: Literature reviews, experimental design, statistical modeling

Libraries/Frameworks: TensorFlow, PyTorch, Scikit-learn, Keras, NumPy, Pandas, NLTK, OpenCV

PROFESSIONAL EXPERIENCE

Let's be the Change

Software Development Intern

Bengaluru, India
Sept 2023 – May 2024

- **Spearheaded** the development of a multi-platform digital solution using Flutter and React, **creating** an intuitive interface for administrators and optimizing community management for usage by 1,000 users, enhancing user experience by 30%.
- **Individually** built an app and dashboard from scratch, streamlining operational processes and improving administrative functionality, resulting in a **40%** increase in efficiency.

Compsoft Technologies

Machine Learning Intern

Bengaluru, India
Aug 2023 – Sept 2023

- **Developed** a Twitter sentiment analysis web app using Flask, MySQL, and Tweepy, providing user authentication and visualizing sentiment results from over 50,000 tweets, offering insights into public opinions during the COVID-19 pandemic.
- **Implemented** sentiment analysis to fetch and analyze tweets based on keywords, visualizing results with pie charts, helping users understand public emotions and opinions with **85% accuracy**.

Alltramic

Software Engineering Intern

New York (Remote)
Mar 2023 – Apr 2023

- **Managed** web automation with Selenium and **implemented** SMTP protocols, **enhancing** proficiency in technology applications like geofencing and **alerting** clients and stakeholders.
- **Administered** satellite imagery and **applied** Python programming, **contributing** to skill development in effective technology utilization and diverse application handling, increasing productivity by 20%..

PUBLICATIONS

[A Deep CNN-Based Approach for Identifying Medicinal and Edible Plants in the Western Ghats Region](#) ,

Published : Dec 2023

- Authored a paper detailing a deep convolutional neural network approach for plant identification, aiming to advance research in medicinal and edible plant recognition within the Western Ghats region, contributing to the 'Atlantis Highlights in Computer Science (AHCS)' series by Atlantis Press, Springer Nature.

[Driver Drowsiness Detection using AI](#),

Published: Nov 2023

- Published a research article in the International Journal of All Research Education and Scientific Methods (IJARESM), exploring AI-based techniques for detecting driver drowsiness, enhancing road safety through advanced detection methods.

ACADEMIC PROJECTS / PERSONAL PROJECTS

Customer Churn-for-business

Jul 2023

- **Deployed** various machine learning models such as Logistic Regression, K-Nearest Neighbors, and Gradient Boosting, **assessing** their performance using k-fold cross-validation, **aiming** to predict customer churn with high accuracy.
- **Emphasized** Gradient Boosting Classifier and **utilized** evaluation metrics like confusion matrices and ROC-AUC curves, **enhancing** model evaluation and tuning skills applicable across different classification challenges.

Women-Safety App

Apr 2023

- **Led** a team of 4 in developing an Android app that prioritizes user safety by **implementing** features like fall detection and hidden camera identification, **enabling** users to take proactive security measures.
- **Incorporated** emergency alerts and location sharing, **ensuring** user safety by notifying pre-set contacts during emergencies, **contributing** to a safer and more secure environment.

Hand Gesture Recognition Collection and Testing

Mar 2023

- **Developed** a real-time hand gesture recognition system using the cv-zone library, **leveraging** a hand detection module and pretrained classification model to **interpret** gestures with accuracy.
- **Focused** on fine-tuning model performance and training accuracy, **demonstrating** practical applications of computer vision and gesture recognition in real-time environments.

LEADERSHIP

Tech-Club Jyothy IT, Core team

Jun 21 – May 24

- **Facilitated** National Level Hackathons, including JITHACK, accommodating around 500 participants, demonstrating leadership and event management skill
- Led the planning and execution of events, ensuring successful execution and high engagement from participants.

Youth-For-Seva, Leader

Aug 22 – May 24

- Led a team of 9 volunteers for the Chhote Scientists campaign, demonstrating leadership and commitment to community service through educational outreach and mentoring.

HACKATHONS

JITHACK, Team Leader

Jun 2021

- **Secured 3rd place** in JITHACK, **collaborated** with team members to **develop** an [Automated Crowd Management System](#), **addressing** challenges in managing public crowding with high accuracy and cost-effectiveness.

Project Competition GSSS College

Nov 2023

- **Facilitated** and **won** for building and showcasing a Women-Safety app with features like electronic device sensors and emergency alert systems, **demonstrating** its effectiveness in enhancing personal safety.

ACTIVITIES / VOLUNTEER WORK / ADDITIONAL TRAINING

Jyothy IT Computer Science Department Newsletter, Editor-in-Chief

Jun 22 – May 24

- Managed the final revisions of "Beyond Beta," employing advanced editing tools to streamline the process.

Pranathi Intercollegiate Debate Competition, Competitor

Jun 21 – Apr 24

- Competed in the Pranathi Intercollegiate Debate Competition, demonstrating advanced debating skills and achieving top placements over the past three years, showcasing proficiency in public speaking and argumentation.

Blogger, Medium

Jan 22 – Present

- Write blogs about life and technology for young adults, engaging readers through insightful and informative content.
- [Website](#)