

# Banda Bhanu Chandra Prasad

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## PROFESSIONAL SUMMARY

Motivated and detail oriented **AI and Software Engineer** with hands on experience in developing machine learning, deep learning, and computer vision solutions. Skilled in designing data-driven applications, building end to end ML pipelines, and integrating large language models (LLMs) for real world automation. Experienced in DevOps workflows and version control through Git and CI/CD tools. Passionate about scalable backend systems, data processing, and impactful AI applications.

## EDUCATION

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| • <b>National Institute of Technology Tiruchirappalli</b><br><i>B.Tech in Electrical and Electronics Engineering; CGPA: 7.7</i> | Tiruchirappalli, Tamil Nadu, India<br><i>Nov 2022 – Present</i> |
| • <b>Narayana Junior College</b><br><i>Telangana Board of Intermediate Education; Percentage: 98%</i>                           | Raviryala, Rangareddy, Telangana<br><i>2021</i>                 |

## SKILLS SUMMARY

- **Languages:** Python, C, C++
- **AI/ML:** PyTorch, TensorFlow, Scikit-learn, CNNs, Transfer Learning
- **Computer Vision & NLP:** OpenCV, PIL, Tesseract OCR, RoBERTa, DiT, Gemma
- **Data Tools:** NumPy, Pandas, Matplotlib
- **Development Tools:** Git, GitHub, Jupyter, VS Code

## INTERNSHIP

- **AI Intern at Tech Mahindra:** Designed and developed an end to end automated document processing pipeline capable of extracting structured information from PDFs and images. Implemented OCR based text extraction (Tesseract) and table detection (img2table, OpenCV); integrated fine tuned RoBERTa and DiT models for document classification; and used Gemma LLM for schema driven field extraction. Achieved high accuracy outputs and reduced manual processing time significantly. (May 2025 – July 2025)

**Tech:** Python, PyTorch, TensorFlow, OpenCV, Tesseract OCR, RoBERTa, DiT, Gemma, Pandas, NumPy, Matplotlib, Jupyter, Git, VS Code

## ACHIEVEMENTS

- Currently maintaining a **4 star rating** on **CodeChef** with a highest rating of **1866**, and a **Specialist** rating on Codeforces with a peak rating of **1654 (Expert)**.
- **Cisco Code-a-thon Finalist** - Ranked among the **Top 75** out of **30,000+** participants nationwide.

## PROJECTS

- **SmartPick: AI-Powered Shopping Assistant:** Developed an AI powered shopping assistant capable of delivering real time price comparisons and personalized recommendations across multiple e-commerce platforms. Utilized NLP frameworks (Rasa NLU, Gemma/GPT 4) for understanding user intent and generating contextual responses. Integrated Scrapy and Playwright for large scale product data aggregation and used ML-based ranking algorithms for optimized suggestions. Implemented review sentiment analysis using DeBERTa/T5 and dynamic price tracking to ensure best value recommendations.  
**Tech:** Python, Rasa NLU, GPT 4, Gemma, Scrapy, Playwright, DeBERTa, T5, Scikit learn, Pandas, NumPy
- **Bike Ride Demand Forecasting using ML:** Built a predictive model to forecast bike ride demand leveraging temporal and meteorological datasets. Conducted preprocessing, feature engineering, and EDA to uncover key usage trends. Compared Linear Regression, RandomForestRegressor, and Gradient Boosting models, achieving superior accuracy and minimal overfitting with RandomForestRegressor. Delivered visualization dashboards and insights for better operational planning.  
**Tech:** Python, Pandas, NumPy, Scikit-learn, Matplotlib
- **Dynamic News Website:** Developed a dynamic, responsive news website using React.js for the frontend and Bootstrap for cross device styling. Integrated NewsAPI to fetch and display real time articles from multiple sources, implemented category based filtering, and optimized performance using lazy rendering for seamless user experience.  
**Tech:** React.js, JavaScript, Bootstrap, HTML, CSS, NewsAPI

## POSITIONS OF RESPONSIBILITY

- **Manager, Workshops, Pragyan (Sep 2023 – Present):** Serving as Manager of the Workshops Team for Pragyan'24, the international techno management festival of NIT Trichy. Spearheaded collaborations with HR and industry experts to organize hands on workshops on emerging technologies. Managed logistics, event planning, budgeting, and on ground execution. Strengthened corporate relations and expanded the festival's technical outreach.
- **Manager, Publicity, Currents (Dec 2023 – Present):** Leading the Publicity Team for Currents, the national level technical symposium of the Department of EEE, NIT Trichy. Directed a 10+ member team in executing outreach campaigns across various colleges, handled event promotions, and coordinated with design and content teams. Enhanced event visibility and participation across institutions.

## EXTRA-CURRICULAR ACTIVITIES

- **Social Activities:** Volunteered under the NSS programme at NIT Trichy, contributing to community development and social awareness initiatives that foster leadership, empathy, and teamwork.
- **Sports Achievements:** Secured **First Place** in Kho-Kho (Men) at Sportsfete'23 and **Third Place** in Kho-Kho (Men) at Sportsfete'24 — the inter-department sports festival organized by NIT Trichy.