

CHEDEMALA BALAJI PRANEETH KAMAL

Aspiring AI & Full-Stack Developer

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[Balaji/LinkedIn](#)

[Pravneeth/Github](#)

EXPERIENCE

Full-Stack AI Developer Intern

Dec 2024 – Feb 2025

RedCrix

Mohali

- Streamlined a Flask-based web application that transforms and edits images (cartoon, sketch, background removal) using OpenCV and rembg, tested on 300+ images, achieving 95% success rate in transformation outputs
- Developed a mobile-first design strategy, which improved the website's accessibility score by 12 points, ensuring a more inclusive user experience for individuals with disabilities.
- Optimized image handling with automatic resizing and JPEG compression, reducing processing time and memory usage by over 30% on large files.

Data Science Intern

Jun 2025 – Aug 2025

AI4SEES

Bangalore

- Engineered a 6D object pose estimation system using YOLOv5-6D, OpenCV, and COLMAP to accurately detect and align 3D models for robotics and AR use.
- Collected and trained on 1,500+ high-quality images with Blender-based synthetic data, reaching under 6° rotation error and 3 cm position error, better than baseline results.
- Collaborated within a cross-functional team to integrate calibration, labeling, and dataset generation tools, ensuring reproducibility, scalability, and efficient workflows across multiple environments.

Software Developer Intern

Jan 2025 – Feb 2025

Foxaisr

Remote

- Enhanced responsiveness and user experience of existing React websites by improving layouts, styling, and mobile compatibility.
- Developed interactive and modern UI components, making the sites more engaging and visually appealing for end users.

PROJECTS

Connectify | *MongoDB, Express.js, React, Node.js, Cloudinary, Socket.io*

- Engineered a real-time chatroom application utilizing the MERN stack and Socket.io, delivering instant messaging, user authentication, and a fully persistent chat history for up to 60 concurrent users.
- Optimized for scalability and concurrency, enabling seamless communication for 30+ simultaneous users with low-latency message delivery.

LexiNext | *Python, Tensorflow, Keras*

- Developed and trained an LSTM-based next-word predictor from scratch, implementing data preprocessing, tokenization, and supervised sequence generation; achieved a perplexity of 2.12 and prediction accuracy of 78% on test data.
- Delivered real-time demos for smart compose and autocomplete, showing 70–80% accurate next-word and code suggestions, highlighting practical applications in NLP and developer productivity tools.

EDUCATION

National Institute Of Technology Sikkim

CGPA: 8.47, Bachelor Of Technology, Computer Science and Engineering

Ravangla, Sikkim

Nov 2022 – Jun 2026

TECHNICAL SKILLS

Languages: Python, C/C++, SQL (MySQL), MongoDB, JavaScript, HTML/CSS

Libraries & Frameworks: Pandas, NumPy, React, Node.js, Flask, Tensorflow, Keras, OpenCV

Developer Tools: Git, VS Code, Conda

Technical Expertise: Data Structures & Algorithms, Linux, Natural Language Processing, Machine Learning, Deep Learning, Operating Systems, Database Management Systems, Computer Networking

Soft Skills: Strong Analytical and Logical Reasoning, Problem-Solving, Team Collaboration and Project Management

CERTIFICATIONS

• AI/ML for Geodata Analysis – ISRO, IIRS

• Data Science – AI4SEE

• Web Dev – RedCrix