

# Akash Ramanni

⌚+91 8669020581 | ✉ [basuakashramanni@gmail.com](mailto:basuakashramanni@gmail.com) | ⚡ [linkedin.com/in/akash-ramanni/](https://www.linkedin.com/in/akash-ramanni/) | ⚡ [github](https://github.com/akash-ramanni)

## Education

<b>JD College of Engineering &amp; Management</b> <i>Bachelor of Technology, Major in Information Technology – CGPA: 8.90</i>	<b>Nov.2022 – June 2026</b> <i>Nagpur, Maharashtra</i>
--	---

## Experience

<b>DRDO (Defence Lab)</b> <i>Paid Internship</i>	<b>August 2025 – Feb.2026</b> <i>Jodhpur, Rajasthan</i>
<ul style="list-style-type: none"><li>- Developed two offline, standalone AI-based desktop applications for defense-oriented image analysis using Python. (<i>Defence Aircraft Contour Detection System and Shadow removal with Image Pre-Processing System</i>). <a href="#">[Project]</a></li><li>- Developed an <b>Aircraft Contour Detection system</b> leveraging Segment Anything Model (SAM) by Meta and OpenCV to accurately extract aircraft outer-body contours and to save the contours in csv format. Built an interactive Tkinter GUI with manual refinement tools such as free-draw, erase, bend, and contour editing for precise user control.</li><li>- Developed a <b>Shadow Removal and Image Pre-Processing System</b> using PyTorch-based deep learning models (DC-ShadowNet and diffusion-based techniques) to remove shadows from aircraft images, with integrated tools for noise removal, image upscaling, and quality enhancement with an interactive Tkinter GUI.</li><li>- Packaged both applications into fully offline executable (.exe) files using PyInstaller, enabling secure deployment on air-gapped systems.</li><li>- Completed a 6-month onsite paid internship at <b>Defence Research and Development Organization (DRDO) – Defence Laboratory, Jodhpur</b>.</li></ul>	

<b>Visvesvaraya National Institute of Technology</b> <i>Summer Research Intern</i>	<b>June 2025 – July 2025</b> <i>Nagpur, Maharashtra</i>
<ul style="list-style-type: none"><li>- Conducted research on speech-driven video summarization for long-form broadcast news by analyzing unsupervised transformer self-attention-based ([CLS]-token) textual segmentation over ASR transcripts, integrating CNN-based visual cues for boundary refinement, and studying BART-based summarization, resulting in a co-authored paper submitted to the <b>IEEE Guwahati Subsection Conference 2026 (GCON 2026)</b> via <b>Microsoft CMT</b>.</li></ul>	

<b>Infosys Springboard Virtual Internship 6.0</b> <i>Python Developer Intern</i>	<b>Dec.2025 – Feb.2026</b> <i>Virtually Online, India</i>
<ul style="list-style-type: none"><li>- Developed a full-stack trade finance platform enabling tamper-proof document and transaction tracking</li><li>- Built a FastAPI REST API with modular routers for auth, documents, ledger, and transactions</li><li>- Implemented JWT-based authentication with role- and org-level access control</li><li>- Designed PostgreSQL schemas for documents, ledger entries, trades, and audit logs</li><li>- Implemented document upload + SHA-256 hashing with immutable ledger records</li><li>- Developed ledger explorer APIs for lifecycle tracking and integrity verification. <a href="#">[Project]</a></li></ul>	

## Technical Skills

**Languages:** Python (Computer Vision and Machine Learning), SQL, JavaScript

**Frontend Technologies:** ReactJS, NextJS, TailwindCSS

**Developer Tools:** Git, GitHub, Postman, Figma, Google Cloud Platform, VS Code, Visual Studio, PyCharm

**Databases:** REST API, Fast API, Google Firebase, MongoDB Atlas, MySQL, Appwrite

**Libraries:** Pandas, NumPy, Matplotlib, Pytorch, Tensorflow, OpenCV

## Projects

**TalentIQ** - Remote Interview Platform | *React, Node.js, MongoDB, WebRTC, Tailwind CSS*

- Developed a full-stack MERN-based remote interview platform with real-time coding and video sessions
- Built a VS Code-like in-browser code editor with real-time execution and session isolation
- Implemented WebRTC-based 1-on-1 video rooms with mic/camera controls and screen sharing
- Designed REST APIs for session management, problems, submissions, and dashboards
- Implemented authentication and authorization with secure session handling
- Built problem management and live dashboards for interview analytics and tracking