LinkedIn
Github

Akash Kumar
Portfolio

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EDUCATION

- **Indian Institute of Information Technology Sri City** — Chittoor, India
  Bachelor of Technology in Computer Science and Engineering — *2020 - 2024*

SKILLS

- **Programming Languages**: C, C++, Python, Java, Javascript, Matlab
- **Frameworks & Libraries**: NodeJS, ExpressJS, ReactJS, Django-Rest-Framework,pandas,Deeplearning, Machine Learning, TensorFlow
- **Tools & Databases**: MongoDB, MySQL, PostgreSQL, Git/Github, Docker, Amazon Web Services

PROJECTS

- **Indian Railway Smart Yard - Gov. Of India** — Live 🔗
  Protocol Development - Python, Django, LoRa, IR
  - Designed a protocol simulation system that demonstrates how a train engine detects and tracks all attached wagons in sequence using short- and long-range communication with live visualization.

- **Discord Bot** — Live 🔗
  Bot Automation - Node.js, Discord.js, JavaScript
  - A smart Discord bot that helps individuals and groups make decisions by analyzing user input, perform option elimination and random selection, designed for real-world public server use.

- **Secure Drive** — Live 🔗
  Full Stack - React.js, Node.js, Express.js, MongoDB, Cloudinary
  - Developed secure file storage like Google Drive with expiring links and no duplicates, using cloud storage for easy scaling.

- **Dr-Helpy** — Live 🔗
  Full Stack - React.js, MongoDB, Express.js, Docker
  - Dr-Helpy is a MERN-based medical store web app for buying medicines online with basic consultation and secure payments..

APIs and Extensions

- **Spam Detector API**:
  A secure Django REST API with JWT authentication for reporting spam numbers and identifying callers with privacy protection.Live 🔗

- **Catalog Search API**:
  An AI-driven image similarity search API using CNN feature embeddings and FAISS for fast, accurate visual product retrieval.private 🔗

- **CookieLens Extension**:
  A privacy-first browser extension that analyzes website cookies and consent behavior locally without collecting user data. Edge 🔗

- **VidGrab Extension**:
  A browser extension that detects downloadable videos and HLS/M3U8 streams locally without collecting user data. Edge 🔗

EXPERIENCE

- **Shoptainment** — Jan 2025 - August 2025
  Software Development Engineer — *remote*
  - Developed a Django-based product search API leveraging deep learning models to support catalog and global search across multiple e-commerce platforms, enhancing product discovery and shopping convenience.
  - Designed the interface for a Shoppable Video Platform with interactive product tagging to seamlessly connect entertainment with e-commerce.

- **Jivass Technologies** — July 2024 - November 2024
  Software Engineer — *Chennai*
  - Implemented protocol for tracking wagons(leverage LoRa, RF, and IR) inside and outside the yard, increasing communication efficiency and reducing delays by 20%.
  - Automated image analysis for industrial inspection using deep learning, reducing inspection preparation time by 30%.

- **All India Marketing Hr Solutioins** — June 2023 - August 2023
  Fullstack Developer Intern — *remote*
  - Created user-friendly web apps using React, Dart, Firebase teamed up to build full solutions and make them faster and better.

RESEARCH WORK

- **Comparative Analysis and Implementation of Cybersecurity Algorithms** :
- Conducted a comparative analysis of advanced cybersecurity algorithms—including RSA, AES, and ECC—to evaluate their efficiency, encryption strength, and suitability for real-time drone communication systems.

RESPONSIBILITIES

- **IOTA**
  Core Member — *2023 - 2024*
  - Engaged as a core member within the IOTA Club, actively participating in fundamental organizational activities and initiatives.
  - Mentored new members by providing technical guidance and organized technical events to foster a collaborative learning environment.