AMARTYA KUNTA

Mobile: +91-9177745610 | e-Mail: amartyakunta16@gmail.com |Location: Hyderabad, India
GitHub: https://github.com/amartya160706
LinkedIn: https://www.linkedin.com/in/amartya-kunta-160706oz/

OBJECTIVE:

Computer science student focused on building secure, scalable systems and solving real-world problems through machine learning, cybersecurity, and digital forensics.

EDUCATION:

University of Hyderabad
Integrated Masters of Technology (B.Tech + M.Tech) in Computer Science and Engineering
Graduation: 2028
CGPA: 6.87

LANGUAGE PROFICIENCY:

- English (Level - C2)
- Telugu (Native, Level -C2)
- Hindi (Level-B2)

TECHNICAL SKILLS & INTERESTS:

- **Programming:** Python, C, C#, C++, Java
- **Core:** Data Structures & Algorithms, Operating Systems, Data Base Management System, Computer Networks, Computer Architecture
- **Web development:** HTML, CSS, JavaScript, Node.js, PHP, XML
- **Databases:** MySQL, MongoDB
- **AI & ML:** Machine Learning, NLP (Basics), Generative AI, Transformers, BERT, Attention Mechanisms
- **Cybersecurity:** Identity & Access Management (IAM), Threat Modeling, Risk Analysis
- **Cloud:** Google Cloud, Vertex AI, MLOps
- **Tools:** Git, Cisco Packet Tracer
- **Interests:** Machine Learning, Cybersecurity, AI Safety, Cloud Security, Distributed Systems

PROJECTS:

1. **Edge-based real-time object detection system | in-progress (2026)**
   - Designing lightweight object detection system for 25 classes using VisDrone and Open Images datasets
   - Optimizing models for edge deployment (≤1GB RAM, ≤50MB size) using quantization and pruning
   - Targeting real-time inference (≥1–2 FPS) on Raspberry Pi and mobile devices
   - Evaluating performance using mAP, latency, and robustness under real-world conditions

2. **Elective management system | in-progress (2026)**
   - Developing role-based system for automated elective allocation using CGPA, preferences, and constraints

- Implementing multi-pass allocation algorithm with merit sorting and seat limits
- Building dashboards with OTP authentication and Excel-to-database integration
- Automating allocation workflows ensuring fairness and consistency

3. IoT-based secure sensor data pipeline - 2026

- Built IoT system using Raspberry Pi and DHT11 sensor for real-time data collection
- Implemented MQTT communication with cloud platforms (ThingSpeak, TTN)
- Developed REST APIs and MySQL storage pipeline
- Secured data using Fernet encryption with JSON formatting

4. SCIS exam scheduling system - 2025

- Developed role-based system for exam scheduling and invigilator assignment
- Implemented timetable generation with conflict handling
- Built admin and student interfaces with notification support

5. Electricity billing system - 2026

- Designed role-based billing system with slab-based tariff computation
- Managed users, bills, and services using MySQL database
- Implemented bill generation, payment tracking, and alert mechanisms
- Built modular C-based billing logic for computation and validation

EXPERIENCE:

Machine Learning Models on Real-world Data (*Data Science Intern – YBI Foundation | June 2024)*

- Built and evaluated machine learning models on structured datasets
- Performed data preprocessing, feature selection, and model comparison
- Applied statistical analysis to extract meaningful insights
- Improved understanding of model evaluation and bias handling

CERTIFICATIONS:

- IBM - Cybersecurity Fundamentals
- IBM - Artificial Intelligence Fundamentals
- Google Cloud - Generative AI, Vertex AI, Responsible AI
- Cisco Networking (Packet Tracer)

LEADERSHIP & ACHIEVEMENTS:

- Best Student Award for overall academic excellence and outstanding contribution to extracurricular activities
- Literary Club Secretary – led and organized multiple events, demonstrating leadership, coordination, and team management
- Professional Badminton Player, demonstrating discipline, teamwork, and competitive performance

---

I hereby declare that the above information is true and correct to the best of my knowledge.

Place: Hyderabad, India Amartya Kunta