SHASHANK REDDYHALLI RAKESH

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EDUCATION

University of California San Diego 2025 - Present
Master of Science in Data Science

Visvesvaraya Technological University 2021 - 2025
Bachelor of Engineering in Computer Science and Engineering - 8.9/10 CGPA

WORK EXPERIENCES

Data Scientist Intern - Conneqt Digital Feb 2024 - Jun 2024
Performed end-to-end data processing, including data cleaning, exploratory analysis, and feature engineering for business datasets. Built predictive and time-series forecasting solutions tailored to business needs. Engineered features to improve model performance and extracted actionable insights through visualization. Collaborated with cross-functional teams to interpret results, refine models, and support data-driven strategies.

Research & Development Intern - Blueed Jul 2024 - Nov 2024
Contributed to feature development and data analytics for "WaitKyu", a queue management system with 1,000+ active users, enhancing functionality and user experience. Collaborated with teams to gather insights and implement data-driven solutions, driving innovation. Executed in testing & optimization to ensure quality deliverables.

Data Science & Machine Learning Intern - Bharat Intern Jan 2024 - Mar 2024
Implemented predictive models for Titanic survival and cat-dog classifier tool on Google Colab, contributing to data analysis, visualization, and model optimization to ensure high accuracy and impactful insights.

Full Stack Web Developer Intern - EdVedha Nov 2023 - May 2024
Crafted a full-stack web application under EdVedha's mentorship, focusing on both frontend and backend. Coordinated with team members to design features and enhance performance, improving user experience.

PROJECTS

AudioVeritas - Deepfake Audio Detection System
Developed a machine learning system for deepfake audio detection, analyzing tone, pitch, and spectral properties to achieve high accuracy and minimize false positives. Designed for media, law, & cybersecurity, it features customizable thresholds and automated reports. This solution enhances integrity and builds trust in communications.

Depicting Handwritten Mathematical Expressions
Designed and implemented a deep learning pipeline using CNN and RNN architectures for optical character recognition (OCR) to identify and interpret handwritten mathematical expressions. Processed image data, trained models for symbol detection and sequence prediction, & evaluated performance to enhance recognition accuracy in real-world scenarios.

AttendEase - Attendance Made Easy
Designed and developed AttendEase, an innovative classroom attendance app integrating biometric authentication and secure local network verification. Achieved 95.56% time efficiency and minimal errors in attendance processing with real-time code validation, ensuring scalability and significantly enhancing overall class management.

Tourism Website - Promoting Heritage and Engagement
Preparing for launch, this website highlights local attractions and events for the District Government. Designed to engage travelers and residents, it enhances community interaction and cultural appreciation. Focused on user-friendly navigation and comprehensive content, it serves as a resource for discovering the district's heritage.

RESEARCH PAPERS

AudioVeritas: A Machine Learning Model to Detect Deepfake Audio - IJRASET 2025
Designed a machine learning-based system to detect and classify deepfake audio as "REAL" or "DEEPFAKE" using advanced signal processing techniques, including MFCCs, Chroma Features, and Spectral Properties. Improved detection accuracy by identifying imperceptible patterns differentiating real and synthetic audio. Focused on

mitigating ethical and security risks associated with synthetic audio misuse. Contributed to advancements in the field of deepfake detection research.

Deep Learning Approach for Early Colorectal Cancer Detection using Speech Biomarkers
-International Journal for Research in Applied Science and Engineering Technology (IJRASET) 2024
This study introduces a deep learning method for early colorectal cancer detection using vocal biomarkers. A convolutional neural network (CNN) trained on voice recordings from CRC patients achieved high accuracy, providing a non-invasive, cost-effective tool that enhances routine health checks and improves patient outcomes.

Security Issues and Defensive Approaches in Deep Learning Frameworks - IJRASET 2023
Conducted in-depth analysis of security vulnerabilities in deep learning frameworks, classifying attacks and proposing defensive strategies. Developed a comprehensive system connecting attacks to defenses, with practical implications for real-world applications. Highlighted future research directions to enhance the security of AI systems.

POSITIONS OF RESPONSIBILITY

Chapter Lead - FOSS United Sep 2023 - Aug 2025
Spearheading FOSS United Shivamogga Chapter, driving city meet-ups to promote open-source software and community engagement. Organizing FOSS Hack 2024 National Hackathon to inspire innovation and collaboration. Volunteering as Parallel Sessions Manager at IndiaFOSS 3.0 Conference, enhancing overall success.

Indian Community Lead - Parrot Security [Hack The Box] Mar 2020 - Jun 2025
Driving the expansion of ParrotSec/ParrotOS in the Indian InfoSec landscape through impactful events and engaging community initiatives, significantly enhancing awareness and user participation in cybersecurity initiatives.

ENTREPRENEURIAL EXPERIENCES

Founder & President - TechForge Club Oct 2023 - Jul 2025
Leading a dedicated team to drive engagement and manage impactful projects, I provide valuable feedback and organize strategic plans to achieve outcomes. By fostering learning and collaboration through workshops, technical events, and competitions, I am committed to elevating our college's ranking and promoting innovation by executing successful hackathons, entrepreneurship summits, and networking opportunities that enhance student skills.

Co-Founder - Cybernity May 2020 - May 2025
Spearheaded the establishment and growth of a dynamic international cybersecurity community, fostering ethical practices and attracting 3,000+ users through a vibrant forum. Led a team of 18, driving teamwork and achieving results during peak periods. Implemented initiatives that enhanced user participation and knowledge sharing.

AWARDS & ACHIEVEMENTS

Hack for Hire - Hackathon - Anvesana Jul 2024
Runners-up in a dedicated team to drive engagement and manage impactful projects, I provide valuable feedback and organize strategic plans to achieve outcomes.

Outstanding Achievement and Contribution Award - JNNCE May 2025
Spearheaded the establishment and growth of a dynamic international cybersecurity community, fostering ethical practices and attracting 3,000+ users through a vibrant forum.

SKILLS & EXTRACURRICULAR

Technical Skills Python, SQL, C, C++, Java, Git, Docker, HTML, CSS, Javascript, MongoDB, AWS
Machine Learning & Deep Learning Tools, Pytorch, Tensorflow

Certifications
- Data Science for Engineers (NPTEL)
- Python Course (Google - Coursera)
- AI/ML Basics (_VOIS)
- Cyber Security (IBM)
- Ethical Hacking (zSecurity - Udemy)

Finances Managed budgets for Hackathons, TechFests, & Summits, ensuring optimal resource allocation

Soft Skills Leadership, Communication, Teamwork, Community building, Public Speaking, Creativity, Adaptability, Critical Thinking, Problem-Solving, Time Management

Extracurricular Table-Tennis, Quiz, Debate Competitions at University level