

Dhruv Gada

drg020502@gmail.com | [Portfolio](#) | [GitHub](#) | [LinkedIn](#)

EDUCATION

Brown University

USA

Master of Science in Computer Science

Aug 2024 – Present

Dwarkadas J Sanghvi College of Engineering

INDIA

Bachelor of Technology in Computer Engineering with Honors in Intelligent Computing | **CGPA: 9.13**

Dec 2020 – May 2024

Courses: Data Structures, Advanced Algorithms, Computer Networks, Database Management, Operating System, Information Security, Software Engineering

Indian Institute of Technology, Madras (Additional Course)

INDIA

Programming & Data Science – Completed Foundational, currently in Diploma Level.

Sep 2020 – Present

Courses: Mathematics, Statistics, Machine Learning, Business Analytics, Tools in Data Science, Programming, Data Structures and Algorithms using Python

WORK EXPERIENCE

Chief Operating Officer & Co-Founder, Crucibo, India

Sep 2022 – May 2024

- Developed & deployed Crucibo application resulting in successful launches on Play Store & App Store with 150+ downloads.
- Led technical interviews and hiring process, then coordinated and mentored a team of 5 recruited interns, implementing agile methodologies, resulting in improved collaboration and a 20% increase in team productivity.
- Designed and implemented backend infrastructure with 30+ RESTful APIs, and managed cloud deployment on AWS EC2, resulting in optimized performance, over 90% uptime, improved scalability, and efficient resource utilization.

Software Developer Intern, SkillStation Academy, India

Oct 2023 – Jan 2024

- Developed and delivered comprehensive JavaScript curriculum using modern ES6+ features, resulting in a 5-week intensive course that provided students with a robust foundation in web development.
- Designed and developed 10+ RESTful APIs using Node.js and Express.js, and led project-based modules, covering server architecture, middleware, database integration, and CRUD operations, enabling students to build functional web applications.

ilaiLabs and Research, Inc, Junior Research Assistant, USA

May 2023 – Aug 2023

- Analyzed deep learning models (CNN, YOLO, RCNN) and Tesseract library for Optical Character Recognition (OCR), resulting in a comprehensive evaluation of state-of-the-art techniques and guided further research directions.
- Implemented GANs for image denoising & developed API for model integration, achieving 98% accuracy & faster processing.

Amepay, Blockchain Engineer, India

Jul 2022 – Jan 2023

- Developed APIs within the blockchain network using Django, explored GraphQL & integrated MetaMask for wallet functionality to enable communication, data transactions, resulting in the successful implementation & readiness of the staking functionality.

TECHNICAL SKILLS

Languages & Databases: C, C++, Java, Python, JavaScript, GoLang, SQL, Dart, Solidity, HTML, CSS, MySQL, MongoDB, Firebase.

Frameworks & Technologies & Tools: Node.js, Django, Flask, REST APIs, FastAPI, Tailwind, Keras, Tensorflow, Pandas, Numpy, GitHub, Git, Docker, Jupyter Notebook, Google Co-laboratory, React JS, HuggingFace, LangChain, AWS, GraphQL.

SELECTED PROJECTS

(full list on [portfolio](#))

Smartphone-Based Pothole and Speed-Breaker Detection System

[Publication](#)

- Developed a Kotlin-based mobile application leveraging smartphone gyroscope sensors to collect and store data in Firebase.
- Data represents accelerations in X,Y,Z with geo-coordinates followed by dual threshold filtering pipeline using CUSUM and mean value-based filters, followed by machine learning algorithms to achieve 93% accuracy in pothole detection.

CommuneFarm

[Project](#)

- Orchestrated development of a scalable central platform, aimed at uniting & empowering thousands of farmers across India.
- Developed a GPS-based machine learning model and IoT simulation to forecast crop yields and mineral content, boosting agricultural practices. A centralized communication platform was created, using React.js, Node.js, Chart.js to share new agricultural policies, advanced farming methods, and donation programs, enhancing the overall farming community.

EmotionWave

[Project](#)

- Developed a dynamic speech-to-emotion web application using real-time speech recognition and sentiment analysis.
- Built the backend with Node.js and Express to handle API requests and sentiment processing. Ensured seamless user experience with comprehensive error handling & real-time visual feedback through dynamic emoji updates.

POSITIONS OF RESPONSIBILITIES

- Core BE Mentor, Unicode** (Jun 2023 - Jun 2024): Held a crucial position & oversaw decision-making for club activities, events, mentored juniors on open-source contributions & guided the development of a VOS viewer-like application for UIUC professor.
- Back End Developer Mentor, Unicode** (Jul 2022 - Jun 2023): Mentored juniors in Node.js, leading projects Med-O-Care health monitoring app & an internship portal, organized coding workshops aimed at preparing over 170 sophomores for a Hackathon.

ACHIEVEMENTS

Smart India Hackathon Finalist '22 | 1st In Ideations at 2 Universities | State Level Pistol Shooter | FIDE Rated Chess Player | Completed all 8 levels of Speech & Drama by Trinity College of London | Best Director Parada Film Festival 2015 |