

BHUVAN RAJANAHALLY JAYAKUMAR

Los Angeles, California | (213) 272-3881 | rajanaha@usc.edu | [Linkedin: Bhuvan Rajanahally Jayakumar](#)

EDUCATION

University of Southern California

Master of Science in Computer Science

Relevant Coursework: Analysis of Algorithms, Information Retrieval and Web Search Engines, Web Technologies

Los Angeles, California

January 2025 - December 2026

Visvesvaraya Technological University

Bachelor of Engineering in Computer Science and Engineering

Relevant Coursework: Operating Systems, Machine Learning and Applications

Karnataka, India

July 2019 - July 2023

WORK EXPERIENCE

STYLEBOT

Software Engineering Intern

- Own end-to-end development of a proprietary, rule-based NLP engine in Python, from architecture to integration, providing a core feature now utilized by over 20 major corporate clients
- Develop and maintain supporting service infrastructure, including a Node.js router, a MongoDB database, and a RESTful API, to deliver seamless, real-time analysis to thousands of enterprise users

Los Angeles, California

April 2025 - Present

UNIVERSITY OF SOUTHERN CALIFORNIA

Volunteer Research Assistant

- Conceptualized and developed an AI-powered mental health chatbot using a fine-tuned Mixture of Experts (MoE) architecture (Mistral-7B), achieving a 3-4 second average response time
- Improved model empathy and reasoning by 30% by conducting user research on engineering students' mental health and curating domain-specific datasets to improve chatbot guidance

Los Angeles, California

February 2025 - May 2025

INDIAN INSTITUTE OF SCIENCE

AI Research Intern

- Engineered a novel pose detection model for Kreed.ai platform by first pioneering India's first medically accurate dataset (>10,000 images in traditional attire) and developing a Python workflow that accelerated data collection by 85%.
- Led a team of 4 interns to scale and optimize model, driving enhanced performance by implementing a structured, iterative testing and feedback process with over 50 active test participants.

Bangalore, India

October 2023 - May 2024

TECHNICAL SKILLS

DEVELOPMENT: Python(Advanced) | HTML/CSS(Intermediate) | SQL(Intermediate) | API

Development(Intermediate) | C++(Beginner) | Javascript(Beginner) | MongoDB(Beginner) | Node.js(Beginner)

ML AND AI: Deep Learning (Intermediate) | Pandas(Intermediate) | Numpy(Intermediate) | Scikit-learn(Intermediate) | Tensorflow (Intermediate) | Transformers (Beginner) | Keras(Beginner)

TOOLS: PyCharm(Advanced) | Unix-OS(Intermediate) | Git(Intermediate) | Flask(Intermediate) | VS Code(Intermediate) | AWS(Beginner)

ACHIEVEMENTS

- Early Career Innovator Award, University of Southern California
- Deep Learning Specialisation, Coursera
- Google Summer of Code, 2022

PROJECTS

Monkey Deterrence System

- Pioneered an autonomous monkey deterrence system using YOLOv5 and a Jetson Nano , preventing thousands in local coffee harvest losses by managing complete project lifecycle

October 2022 - January 2023

Google Summer of Code 2022 – Plone Foundation

- Spearheaded complete modernization of a key Plone 6 add-on by migrating entire codebase to Python 3, boosting test coverage by 60% with over 50 new tests, and implementing multilingual support to expand its global reach by 50%.

April 2022 - September 2022

COMMUNITY INVOLVEMENT

Lead Facilitator | Trojans on Trails

- Coordinated and executed monthly hikes for over 50+ students in Los Angeles area by managing all logistics, from initial planning and polling of hike difficulty on Discord to preparation of detailed pre-hike and post-hike documentation.

University of Southern California, Los Angeles

Technical Head | Devops Team

- Led a team of 80+ students, mentoring on emerging technologies—including AI, Machine Learning, IoT, and blockchain—and delivered over 15 workshops to align club with industry trends.

Malnad College of Engineering, Hassan