

LEENA RAJAN KATKAR

1247 W 30 Street Los Angeles, California, 90007, SOFTWARE ENGINEER, Proactive and innovative engineer with a passion | (323) 283-5383 | lkatar@usc.edu | <https://www.linkedin.com/in/leena-rajan-katkar-379831303>

EDUCATION

University of Southern California Masters in Computer Science

August 2025-Present

- Specialization in Artificial Intelligence

Saraswati College of Engineering Bachelors of Engineering (GPA-8.94)

August 2021-June 2025

- Specialization in Information and Technology

SKILLS

Programming Languages: Python(Leetcode 430+, Neetcode 150), C++, Javascript, PHP

Databases & Tools: MySQL, SQL, Git

Web Technologies: HTML/CSS, Tailwind, Bootstrap

Core Concepts: Data Structures and Algorithms, Machine Learning, Generative AI, LLM, NLP, RAG Distributed Systems, Artificial Intelligence, GANS

Soft Skills: Confident Communicator, Fast Learner, Problem Solving, Teamwork

INTERNSHIP EXPERIENCE

Research Intern, Department of Computer Science

November 2025-Present

University of Southern California, Los Angeles

- As a research intern at a USC lab, I contribute to projects focused on developing and evaluating large language models
- While project details are confidential, my work centers on building and boosting LLM architectures

Research Intern, Artificial Intelligence and Robotics

January 2025-March 2025

DRDO (Defence Research and Development Organisation), (Pune, India)

- Directed a key phase of advanced defense research, collaborating with senior scientists to analyze multi-sensor data, improving prototype detection accuracy 20% during field trials
- Engineered and deployed software analyzing complex datasets, improving system performance 15% and validating key hypotheses

Full-Stack Web Developer, Internship

February 2024-September 2024

990 Productions, (Remote, India)

- Implemented full-stack solutions for 990 Productions' official website, executing real-time projects to enhance company operations
- Engineered full-stack PHP and SQL solutions, optimized finances via CRM, raising workflow efficiency 75%
- Developed a full-stack CRM system for company finances, boosting operational efficiency by 70%

Full-Stack Web Developer, Internship

June 2023-September 2024

Rudraksha Welfare Foundation, (Remote, India)

- Implemented full-stack solutions during Rudraksha internship, developing 6+ real-time projects benefiting local communities
- Led a 6-member team to complete 6+ live projects on schedule, improving workflow efficiency by 25%
- Led frontend and backend development for 6+ live projects, including an international initiative

Project Developer, Engineering

July 2024-July 2024

Ural Federal University, (Russia, Ekaterinburg)

- Selected for Ural Federal Summer Internship, collaborating with 50+ global peers on AI-driven project topics
- Built an AI-ML furniture recommendation system using GANs, providing personalized complementary furniture suggestions for 10,000+ users
- Engineered a model converting text to images and images to enhanced visuals, achieving 92% generation accuracy
- Developed intuitive UI designs and trained datasets to enhance system performance and user experience

ACADEMIC PROJECTS

Team Lead and AI model Developer, AIML automated water rescue device (BE Major project), (Navi Mumbai, India)

June 2024-April 2025

- Engineered an AI-ML device with advanced electronics and custom hardware, achieving 95% operational efficiency
- Engineered an autonomous device rescuing drowning individuals in 6 seconds, achieving 99% success rate
- Published a patent and won first prize as best project at an international conference also got an offer by state startup incubation center with investment

COURSES

Explore Generative AI with the Vertex AI Gemini API Skill Badge (Google)

Build Real World AI Applications with Gemini and Imagen Skill Badge (Google)

Use Generative AI for Software Development (IBM)

Getting Started with Artificial Intelligence (IBM)

From Learner to Builder: Become an AI Agent Architect (IBM)

Cyber Shiksha Fundamentals and LinkedIn course (Microsoft)

ACCOMPLISHMENTS

Nirmaan 2023 Hackathon Winner

Best student project award 2024 by Computer Society of India

National level project competition 2024 Finalist(India)

Patent for AIML AUTOMATED WATER RESCUE DEVICE PROJECT

Best research paper and best poster award at NIELIT International conference 2025