

# SHREYA LAL

DEEP LEARNING ENGINEER

## CONTACT

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## SKILLS

- Image Processing, CNN, RNN, NLP
- Python, NumPy, Pandas, OpenCV, TensorFlow
- Communication and Presentation
- Teaching and Mentorship
- Problem Solving and Analytical Thinking
- Collaboration and Team Work

## TOOLS

- OpenCV, TensorFlow, Hugging Face
- Anaconda, Colab
- Git, Jira, Streamlit
- Familiar- Docker, Kubernetes, Azure

## EDUCATION

### Master of Technology, CSE

VSSUT, Burla, India

84% | 2015-2017

### Bachelor of Technology, IT

SOA University, Bhubaneswar, India

89% | 2009-2013

## KEY ACHIEVEMENTS

- Published IEEE conference paper on apple fruit classification using BPFF neural network (2017). **DoI: 10.1109/SSPS.2017.8071621**
- Automated testing processes, saving 60% in testing time and increasing coverage by 40%.

## CERTIFICATIONS

- Deep Learning Specialization – Andrew Ng
- Google Cloud Skills Boost: Introduction to Gen AI, LLMs, and Responsible AI
- Natural Language Processing Specialization – Andrew Ng (Coursera, ongoing)
- UGC -NET Assistant Professor (National Level Exam India)
- Cloud Computing - NPTEL (NL Exam India)

## PROFILE

Experienced Deep Learning Engineer with over 5 years in developing and deploying advanced algorithms for image classification, object detection, and NLP. Understands traditional machine learning algorithms and state-of-the-art techniques, with a proven ability to deliver impactful solutions in autonomous vehicles, image analysis, and AI-driven systems. Skilled in management and communication, leveraging diverse professional experiences to excel in collaborative environments. Committed to continuous learning and eager to stay ahead in emerging AI technologies such as LLM, Generative AI, to drive organizational success.

## WORK EXPERIENCE

### Professional I - Senior Software Engineer

Capgemini Engineering - Global Edge, India

Aug 2022 – Jan 2023

- Worked collaboratively with a cross-functional team to develop an in-car cabin monitoring system, ensuring data collection under predefined conditions.
- Implemented image processing algorithms using OpenCV and Python, with strong fundamental understanding in Neural Networks, Computer Vision, and NLP.
- Enhanced object recognition in low-light conditions using OpenCV, implementing Canny edge detection, thresholding and histogram equalization, improving detection accuracy by 25%.
- Built a robust data cleaning and preprocessing pipeline for image datasets using OpenCV and Python, ensuring consistent background and brightness levels for improved model training.
- Automated acceptance testing for printer and scanner color models using Robot Framework, reducing testing time by 60% and increasing test coverage by 40% for a global semiconductor chip manufacturer.

### Assistant Professor - Computer Science

R.V.S. College of Engineering and Technology, India

Sep 2018 – Jan 2021

- Taught AI, Machine Learning, and Computer Graphics, integrating cross-disciplinary concepts to enhance students' ability to apply computer science principles across domains.
- Promoted hands-on learning in RDBMS and Data Structures, increasing student engagement and interest in foundational subjects.
- Conducted research in Computer Vision and Deep Learning, titled "Recognition of Foliar Disease and Pest in Oryza Sativa using EfficientNet-B4 with Transfer Learning".
- Supervised 20+ undergraduate and postgraduate students annually on advanced AI projects, including CNN-based fruit classification, pet breed identification, and object detection using YOLO and R-CNN, achieving high performance accuracy.
- Led the college's CodeChef chapter as Faculty Advisor, fostering a culture of coding excellence and collaboration among students.
- Mentored 30+ undergraduate students for holistic academic and technical development.

### Assistant Systems Engineer

Tata Consultancy Services Ltd., India

Dec 2013 – Aug 2015

- Utilized Pandas, NumPy, and OpenCV for data cleaning, normalization, and augmentation of image datasets.
- Developed web-based applications using Python Framework – Django, including models, views, and templates for CRUD operations in database-driven applications.
- Utilized MySQL and Python scripts to update database content and manipulate files.
- Resolved ongoing issues and documented project progress using software engineering best practices.
- Refactored AS400/COBOL code for a French multinational insurance company, delivering high-quality, well-documented code that met project deadlines and passed all unit acceptance tests.

### Relocation

Career Break

Mar 2023 – Present

Relocated to Canada, gaining cross-cultural experience and expanding global perspective. During this time, engaged in skill development and industry research before returning to India, now actively pursuing new career opportunities.