Lokesh Nandanwar

lokeshkvn.github.io

LinkedIn: linkedin.com/in/lokeshkvn Github: github.com/lokeshkvn

Education

M.S. (Research) in Computer Vision and Image Processing

2019 - 2021

[°] Univeristy of Malaya, Kuala Lumpur, Malaysia

Current 3.7/4.0

B.Tech in Information Technology

2015 - 2019

 $^{\circ}$ National Institute of Technology (NIT) Durgapur, Durgapur, India

First Class (Distinction) 8.32/10

12th Maharashtra State Board, Electronics Group

2015

Shivaji Science College, Nagpur, India

88.31 %

10th Maharashtra State Board

2013

Gayatri High School, Nagpur, India

94.55 %

Research Experience

CVPR Unit, Indian Statistical Institute

Kolkata, India

Project Linked Person

Since November 2020

Working on Scene Text detection in Blur images, Multilingual Scene Text Style Transfer, Text style generations and exploring GANs, Auto-Encoder, etc

Multimedia Lab, University of Malaya

Kuala Lumpur, Malaysia

Graduate Research Assistant

November 2019 - November 2020

Worked on 3D Scene Text Detection, Forgery identification, Social Media image classification, Drone imagery tree counting, etc and other real world Computer Vision, Deep learning and Image Processing problems.

Medical Image analysis Lab, NIT Durgapur

Durgapur, India

Undergraduate Research Assistant

June 2018 - October 2019

Worked on Machine Learning and Deep Learning in Medical Imaging for Automation of Disease Detection, Classification, and Segmentation also published some of my research findings

Industrial Experience

HSBC Technology India

Pune, India

Software Engineer Trainee

June 2019 - November 2019

Worked in a Commercial Banking, Digital Division projects

Google Summer of Code (GSoC 2018)

LMU Munich, Germany (Remote)

Student Developer, Software and Computational Systems Lab

April 2018 - August 2018

Worked on development of UI for generating Automatic reports along with building testing framework of **CPAchecker (Open Source Tool for configurable software verification)**

Satvix Informatics Pvt. Ltd.

Pune, India

Software Development Internship

May 2017 - November 2017

Worked on Progressive Web Application in Mobile platforms in Ionic framework with Angular and Ionic 2. Designed and developed QwikSurveys App (Offline Survey Application) using QwikSurveys API. Released the first version of the app.

Teaching Experience

Short Term Course: Machine Learning for Image and Video Recognition

NIT Durgapur, India

Lab Assistant

January 2019

Demonstrated and tutored 50+ people in Short Term Course sponsored by TEQIP-III in collaboration with NIT Durgapur in the field of Machine learning and Image Processing

Robocell, Center for Cognitive Activities, NIT Durgapur

Durgapur, India

Senior Crew Member

June 2016 - June 2019

Organised 5 workshop in span of 3 years for 150+ undergrads in the field of Home Automation using Android and Arduino, Blutooth, etc. Built a home automation system and an Android app to control appliances inside home remotely, and an automatic cut-off of electricity when no human presence is detected using PIR sensor

Awards and Recognition

AcTiVComp Challenge - 25th ICPR 2020, Milan, Italy

 $^{\circ}$ 3rd in Competition on Superimposed Text Detection and Recognition in Arabic News Video Frames,

Multilingual Text Segmentation in Images and Videos

October 2020

Speaker, Catalyst Track, Data Fest 2020, fest.ai

China Students Service Outsourcing Innovation and Entrepreneurship Competition

May 2019

Belt and Road Award, SegWare: Brain Image Segmentation and Visualization Software

Winner of Smart India Hackathon 2019

March 2019

 $^{\circ}$ Won 11akh INR prize, Brain Image Segmentation and Visualization with Machine Learning

Awards for Tech Events in National level College Fests

 $^{\circ}$ 1st in Martian'16, Runner-up in Freemex'17, 2nd Runner-up in Hot Pursuit'15, NIT Durgapur, India

International Mathematics Olympiad

February 2014

Gold Medal (Division level)

Elementary and Intermediate Drawing Examinations Maharashtra State

Secured "A" Grade

Journal Proceedings

- Forged Text Detection in Video, Scene and Document Images: Lokesh Nandanwar*, Shivakumara Palaiahnakote, Prabir Mondal, K. S. Raghunandan, Umapada Pal, Tong Lu, Daniel Lopresti IET Image Processing 2021
- DCT-Phase Statistics for Forged IMEI Numbers and Air Ticket Detection: Lokesh Nandanwar*, Palaiahnakote Shivakumara, Swati Kanchan, V Basavaraja, DS Guru, Umapada Pal, Tong Lu, Michael Blumenstein, Expert Systems with Applications 2020
- A New Method For Detecting Altered Text In Document Images: Lokesh Nandanwar*, Shivakumara Palaiahnakote, Umapada Pal, Tong Lu, Daniel Lopresti, Bhagesh Seraogi, Bidyut B. Chaudhuri International Journal of Pattern Recognition and Artificial Intelligence 2020
- A New Hybrid Method For Caption And Scene Text Classification In Action Video Images: Lokesh Nandanwar*, Shivakumara Palaiahnakote, Umapada Pal, Tong Lu, Michael Blumenstein International Journal of Pattern Recognition and Artificial Intelligence 2020

Conference Proceedings

- Chebyshev-Harmonic-Fourier-Moments and Deep CNNs for Detecting Forged Handwriting: Lokesh Nandanwar*, Shivakumara Palaiahnakote*, Kundu Sayani, Umapada Pal, Tong Lu, Daniel Lopresti, 25th ICPR 2020
- Local Gradient Difference Based Mass Features for Classification of 2D-3D Natural Scene Text Images
 Lokesh Nandanwar*, Shivakumara Palaiahnakote*, Raghavendra Ramachandra, Tong Lu, Umapada Pal, Daniel Lopresti, Nor Badrul Anuar, 25th ICPR 2020
- A New Common Points Detection Method for Classification of 2D and 3D Texts in Video/Scene Images
 Lokesh Nandanwar*, Palaiahnakote Shivakumara, Ahlad Kumar, Tong Lu, Umapada Pal, Daniel Lopresti, 14th
 IAPR DAS 2020
- A New DCT-FFT Fusion based Method for Caption and Scene Text Classification in Action Video Images: Lokesh Nandanwar*, Shivakumara Palaiahnakote, Suvojit Manna, Umapada Pal, Tong Lu and Michael Blumenstein, ICPRAI 2020

- A New Method For Detecting Altered Text in Document Images: Lokesh Nandanwar*, Shivakumara Palaiahnakote, Umapada Pal, Tong Lu, Daniel Lopresti, Bhagesh Seraogi and Bidyut. B. Chaudhuri, ICPRAI 2020
- Brain Tumor Classification Using ResNet-101 Based Squeeze and Excitation Deep Neural Network:
 Palash Ghosal, Lokesh Nandanwar*, Swati Kanchan, Ashok Bhadra, Jayasree Chakraborty, Debashis Nandi,
 ICACCP 2019

Grants and Scholarships

University of Malaya Financial Aid

2020

Full funding for Tuition fees for Masters Degree Course

China Students Service Outsourcing Innovation and Entrepreneurship Competition

May 2019

10,000¥ (Chinese Yuan) for Attending and Visiting China

Technical and Personal skills

- **Programming Languages and Frameworks:** C, C++, Python, Pytorch, Keras, Tensorflow, Open CV, Git, Streamlit, FastAPI, Fast.ai, HTML, CSS, JavaScript, Angular/AngularJS,
- Industry and Software Skills: Deep Learning, Machine Learning, Computer vision, Image Processing, Mobile App Development, Full Stack Web Development, Python Applications development. Proficient with MS office products like Powerpoint, excel sheets, word, etc.
- **Personal Skills:** Creative person, Eager to learn, experiment and build things, Easily adaptable to environment and work culture. Work well in a team, good in managing people, optimistic attitude, and diligent person.

Extra-curricular activities

- Volunteer for translation of Russian Deep learning Course in English language (Videos and Notebooks), conducted by Catalyst Team, Deep Learning School, Tinkoff and MIPT Russia
- o Executive Fest coordinator of AAROHAN, The Annual Techno-management fest of NIT Durgapur
- o Participated and won in various drawing and quiz competitions.
- Actively participate in open source events and contribute to open source softwares, projects

References

Dr. SHIVAKUMARA PALAIAHNAKOTE

Associate Professor, Faculty of Computer Science & Information Technology, University of Malaya (UM), Malaysia

Email: shiva@um.edu.my

Prof. UMAPADA PAL

Professor and Head, Computer Vision and Pattern Recognition Unit, Indian Statistical Institute (ISI), Kolkata, India

Email: umapada@isical.ac.in

Prof. MOHAN KANKANHALLI

Dean, School of Computing, Provost's Chair Professor of Computer Science,

National University of Singapore (NUS), Singapore

Email: mohan@comp.nus.edu.sg