

Albert Mundu

PHD RESEARCH SCHOLAR · COMPUTER VISION

Computer Vision and Biometrics Lab, IIIT Allahabad, Prayagrah, U.P., India

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“Looking for career opportunities in AI/Vision/Text”

Education

Tripura Institute of Technology

DIPLOMA IN COMPUTER SCIENCE AND TECHNOLOGY

• CGPA: 7.7/10

Agartala, Tripura, India

Jun. 2007 - May. 2010

NERIST(North Eastern Regional Institute of Science & Technology)

B.TECH. IN COMPUTER SCIENCE AND ENGINEERING

• CGPA: 3.35/5

Nirjuli, Arunachal Pradesh, India

Jun. 2010 - Jun. 2013

Indian Institute of Information Technology Allahabad (IIIT Allahabad)

MTECH - PHD (INTEGRATED)

• CGPA: 8.21/10

Prayagrah, U.P., India

Aug. 2016 - Present

Skills

Programming Python, C/C++, LaTeX

Web Flask, SQL, PHP, HTML5, CSS3, Javascript

Languages English, Hindi, Assamese

ML/DL Frameworks PyTorch, TensorFlow

Experience

Computer Vision & Biometrics Lab, IIIT Allahabad

RESEARCH SCHOLAR

- Worked on Object Detection, GANs, Transformers, Vision-Text (Scene Graph Generation, Scene Understanding, Image Captioning)
- Worked on Efficient Transformers for reducing time and space complexity
- Worked on Large Scale Multi-Metric Learning for face verification
- Mentored M.Tech. Students and B.Tech. Interns

Prayagrah, U.P., India

Jan. 2018 - Present

Spyne AI

COMPUTER VISION ENGINEER (INTERN)

- Implemented realistic shadow generation for general objects (e-commerce)
- Created shadow datasets from 3D models (Blender/OpenGL)

Gurgoan, India

March. 2022 - June - 2022

Department of IT, IIIT Allahabad

TEACHING ASSISTANT

- Conducted tutorials and practical labs on the following under/post-graduate subjects:
 1. Deep Learning
 2. Visual Recognition
 3. Distributed Computing
 4. Computer Architecture and Organization
 5. Data Compression
 6. Image & Video Processing
 7. Computer Graphics

Prayagrah, U.P., India

Sep. 2016 - Aug. 2022

Department of CSE, NIT Silchar

TECHNICAL ASSISTANT

- In-Charge of organizing and teaching in the labs on the following undergraduate subjects:
 1. Operating Systems
 2. Computer Networks
 3. Data Structures
 4. Programming in C

Silchar, Assam, India

Sep. 2015 - Aug. 2016

Department of ECE, NIT Silchar

PROJECT ENGINEER

Silchar, Assam, India

Jun. 2014 - Sep. 2015

- Worked on the project titled “**Development of Speech-based Multi-level Person Authentication System**” supervised by Dr. Rabul Hussain, Professor, Department of ECE, NIT Silchar in collaboration with IIT Guwahati and NEHU Meghalaya and funded by Deity, Government of India

Electronics & Radar Development Establishment (LRDE), DRDO

INTERN

Bengaluru, India

Jun. 2012 - August. 2012

- Designed and implemented “Radar Target Simulator”

Project

Online QR-Based Attendance System for Events

IIIT ALLAHABAD

IIIT Allahabad

Aug. 2022

- QR-Based attendance system to keep track of attendance history/entries
- The system can be loaded in smartphones for ease of operating the webapp
- Implemented using PHP, MySQL, Apache2 Server, HTML5, CSS3, Javascript

Customized Bulk Mailing Tool

IIIT ALLAHABAD

IIIT Allahabad

2018

- Designed this tool for automated bulk mailing with custom email content for each recipient
- Designed and developed with Flask, HTML5, Python, Jinja

Multi-Metric Learning for Face Verification in the Unconstrained Environment

MTech SUMMER PROJECT, IIIT ALLAHABAD

IIIT Allahabad

2017

- Designed and implemented this verification system using PyTorch

Cluster Middleware - Load Balancer

COURSE PROJECT, DISTRIBUTED SYSTEMS, IIIT ALLAHABAD

IIIT Allahabad

2017

- Designed and developed the Load Balancer using PHP, Apache2 Server

Mechanism for Wormhole Detection in Mobile Ad-hoc Network (MANET)

UNDERGRADUATE PROJECT, NERIST, ARUNACHAL PRADESH, INDIA

NERIST, India

2013

- Designed the mechanism for detecting wormhole using NS2 Simulator (C++)

Institute Website for NERIST

TEAM PROJECT, NERIST, ARUNACHAL PRADESH, INDIA

NERIST, India

2012

- Designed, implemented and deployed the institute website, which was up for five years (2012 -2016).
- Team Lead (Design & Development)

Network Security using Extended RSA Cryptosystem

DIPLOMA PROJECT, TRIPURA INSTITUTE OF TECHNOLOGY, AGARTALA, INDIA

TIT Agartala, India

May. 2010

- Designed and implemented “Extended RSA Cryptosystem” in C/C++ as a final Academic Project.

Extracurricular Activity

International Conference on Computer Vision & Machine Intelligence (CVMI-2022)

PAPER REVIEWER & CORE MEMBER

IIIT Allahabad

Aug. 2022

- Conducted Technical Paper Sessions
- Reviewed technical papers
- Designed banners and other miscellaneous for the conference

IEEE SPS Project on Advances in Biometric Signal Processing Techniques

CORE MEMBER

IIIT Allahabad

Oct. 2021

- Designed, developed and maintained event website as well as designed banners for the event

5th IAPR International Conference on Computer Vision & Image Processing (CVIP-2020)

PAPER REVIEWER & CORE MEMBER

IIIT Allahabad

Dec. 2020

- Conducted Technical Paper Sessions
- Reviewed technical papers
- Coordinated the remote operations of the event
- Designed and maintained the conference website

3rd IEEE Conference on Information & Communication Technology (CICT-2019)

PAPER REVIEWER & CORE MEMBER

- Conducted Technical Paper Sessions
- Reviewed technical papers
- Designed banners for the conference

IIIT Allahabad

Dec. 2019

ADASIVA2019 - Second National Workshop & Summer School

ORGANIZER

- Conducted hands-on session on “Python & Getting Started with Deep Learning”
- Conducted hands-on session on “Object Detection using PyTorch”
- Designed, developed and maintained event website as well as designed banners for the event

IIIT Allahabad

Jun. 2019

ADASIVA2018 - Two Week National Workshop & Summer School

ORGANIZER

- Conducted hands-on session on “Python & Getting Started with Deep Learning”
- Designed, developed and maintained event website as well as designed banners for the event

IIIT Allahabad

Jul. 2018

Honors & Awards

DOMESTIC

2016 **Awarded**, GATE Fellowship for M.Tech.-PhD. by MHRD, Govt. of India

India

Publication

CONFERENCE

2021 **Vishal Kumar*, Albert Mundu*, Satish Kumar Singh**, “Scene Graph Generation with Geometric Context”, 6th IAPR International Conference on Computer Vision & Image Processing, 2021

IIT Ropar, India