Ayan Das   *Curriculum vitae*

CONTACT INFORMATION

138/3, 10 no. lane, Nabatirtha, P.O. Udayrajpur
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RESEARCH INTERESTS

Machine Learning, Deep Learning, High performance computing

- Theoretical & computational aspects of Machine learning (ML)/Deep learning (DL)
- Efficient implementation of ML/DL algorithms on modern hardware
- High performance parallel/distributed computing

EDUCATION

Indian Institute of Technology (IIT) Kharagpur   2018

- Currently pursuing M.S. in the Dept. of Electrical Engineering (EE)
- Research Topic: Optimization for Tensor computation & Deep Learning (DL)

Institute of Engineering & Management, Kolkata (India)   2017
University: Maulana Abul Kalam Azad University of Technology (MAKAUT)

- Department of Electronics & Communication Engineering
- DGPA: 7.92/10 (Including all 8 Semesters)
- B.Tech Thesis: *'Gender recognition from body images using part-based model'*

Udayrajpur Hariharpur High School (WBCHSE)   2013

- Higher Secondary Examination (12th Standard)
- Aggregrate: 79%

Barasat Mahatma Gandhi Memorial High School (WBBSE)   2011

- Secondary Examination (10th Standard)
- Aggregrate: 79.625%

PUBLICATIONS

1. (Journal) P.P. Roy, A.K. Bhunia, **A.Das**, P.Dhar, U.Pal, "Keyword spotting in doctors handwriting on medical prescriptions", Expert Systems with Applications (ESWA, Impact Factor: 2.981), Elsevier. `DOI: 10.1016/j.eswa.2017.01.027`

2. (Journal) **A.Das**, S.Das, "Feature Weighting and Selection with a Pareto-optimal Trade-off between Relevancy and Redundancy", Pattern Recognition Letters (PRL, Impact Factor: 1.586), Elsevier. `DOI: 10.1016/j.patrec.2017.01.004`

3. (Journal) P.P.Roy, A.K.Bhunia, **A.Das**, P.Dey, U.Pal, "HMM-based Indic Handwritten Word Recognition using Zone Segmentation", Pattern Recognition (PR, Impact Factor: 3.399), Elsevier. `DOI: 10.1016/j.patcog.2016.04.012`

4. (Conference) P.P.Roy, **A.Das**, D.Majhi, U.Pal, "Retrieval of Scene Image and Video Frames using Date Field Spotting", The 3 rd IAPR Asian Conference on Pattern Recognition. `DOI: 10.1109/ACPR.2015.7486594`

5. (Conference) **A.Das**, A.Bhunia, P.P.Roy, U.Pal, "Handwritten Word Spotting in Indic Scripts using Foreground and Background Information", The 3 rd IAPR Asian Conference on Pattern Recognition. `DOI: 10.1109/ACPR.2015.7486539`

6. (Conference) A.K.Bhunia, **A.Das**, P.P.Roy, U.Pal, "A Comparative Study of Features for Handwritten Bangla Text Recognition", 13 th International Conference on Document Analysis and Recognition (ICDAR), pp. 636-640. `DOI: 10.1109/ICDAR.2015.7333839`

RESEARCH EXPERIENCE	**2014** **Area of Research: Handwritten Text/Document Recognition** TO *Advisor*: Prof. Partha Pratim Roy, Ph.D. **2015** - Dept. of Computer Science. - Indian Institute of Technology, Roorkee, India. **2015** **Area of Research: Evolutionary Computations & Machine Learning** TO *Advisor*: Dr. Swagatam Das, Ph.D. **2016** - Electronics and Communication Sciences Unit - Indian Statistical Institute, Kolkata, India

RELEVANT PROJECTS

- Currently attached to project "MIRIAD" funded by **Intel India Pvt. Ltd.**
- "digiLib", a tiny Digital logic circuit designing & simulation library in C++
- "Imagenary", a computer-vision based mouse and keyboard interface for PCs.
- A personal blogging site written in Jekyll (http://dasayan05.github.io/)

ACHIEVEMENTS

- A member of "Kharagpur Learning, Imaging and Visualization (KLIV) research group" at IIT Kharagpur
- Former member of "Innovation and Entrepreneurship Development Center (IEDC Lab)" funded by "Department of Science & Technology (DST), Govt. of India"
- Former vice-president of R&D Dept., Entrepreneurship-Cell (E-Cell), IEM Kolkata
- Secured Rank 3673 in West Bengal Joint Entrance Examination (WBJEE) in 2013
- Secured Rank 3359 in Graduate Aptitude Test in Engineering (GATE, EC stream) in 2017

TECHNICAL SKILLS

- Programming Languages: C, C++(11/14), MATLAB, Python 3
- ML/DL framework: PyTorch, Tensorflow
- Hardware Exposure: AVR microcontroller, Raspberry Pi
- Mathematics: Linear-algebra, Probability, Statistics.
- HPC: Cluster management, MPI, OpenMP
- Miscellaneous: Linux (OS), LaTeX, Graphics programming (OpenGL) basics

REFERENCES

Dr. Debdoot Sheet
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Indian Institute of Technology, Kharagpur.

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