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- CONTACT INFORMATION** 86/2, South Baksara Road. (+91)-9038858890
Near Vivekananda Palli, P.O.- Baksara. ankankumarbhunia@gmail.com
District - Howrah, West Bengal. Homepage
India, Pin - 711110. GitHub Profile
- RESEARCH INTERESTS** Computer Vision, Deep Learning, Machine Learning, Reinforcement learning, Document Image Analysis.
- EDUCATION** **Jadavpur University, Kolkata, India**
- B.E Electrical Engineering - Current Status: 4th year student 2020(Expected)
- Current CGPA 8.3
- Sibpur S.S.P.S. Vidyalaya, Howrah, India**
- Higher Secondary (12th Standard, WBCHSE) - Aggregate: 92.4% 2016
- Secondary (10th Standard, WBSE) - Aggregate: 90.5% 2014
- JOURNAL PUBLICATIONS**
- Ayan Kumar Bhunia, Subham Mukherjee, Aneeshan Sain, **Ankan Kumar Bhunia**, Partha Pratim Roy, Umapada Pal, "Indic Handwritten Script Identification using Offline-Online Multimodal Deep Network", **Information Fusion**, 2020, Elsevier.(I.F.-10.716) (Accepted) [\[PDF\]](#)
 - Ayan Kumar Bhunia, **Ankan Kumar Bhunia**, Shuvojit Ghose, Partha Pratim Roy, Umapada Pal, "A Deep One-Shot Network for Query-based Logo Retrieval", **Pattern Recognition**, 2019, Elsevier.(I.F.-5.589) (DOI: 10.1016/j.patcog.2019.106965)[\[PDF\]](#) [\[GitHub\]](#)
 - **Ankan Kumar Bhunia**, Aishik Konwar, Abir Bhowmik, Ayan Kumar Bhunia, Partha Pratim Roy, "Script Identification in Natural Scene and Video Frame using Attention based Convolutional LSTM Network", **Pattern Recognition**, 2019, Elsevier.(I.F.-3.962) (DOI: 10.1016/j.patcog.2018.07.034) [\[PDF\]](#) [\[GitHub\]](#)
 - **Ankan Kumar Bhunia**, Alireza Alaei, Partha Pratim Roy, "Signature Verification Approach using Fusion of Hybrid Texture Features", **Neural computing and Applications**, Springer. (I.F.-4.213) (DOI: 10.1007/s00521-019-04220-x) [\[PDF\]](#)
- CONFERENCE PUBLICATIONS**
- Ayan Kumar Bhunia, Abhirup Das, **Ankan Kumar Bhunia**, Sairaj Kishore, Partha Pratim Roy, "Handwriting Recognition in Low-resource Scripts using Adversarial Learning", (CVPR), 2019, IEEE [\[PDF\]](#) [\[arXiv\]](#) [\[GitHub\]](#)
 - **Ankan Kumar Bhunia**, Ayan Kumar Bhunia, Aneeshan Sain, Partha Pratim Roy, "Improving Document Binarization via Adversarial Noise-Texture Augmentation", *International Conference on Image Processing (ICIP)*, 2019, IEEE [\[arXiv\]](#) [\[GitHub\]](#)
 - **Ankan Kumar Bhunia**, Ayan Kumar Bhunia, Prithaj Banerjee, Aishik Konwer, Abir Bhowmick, Partha Pratim Roy, Umapada Pal, "Word Level Font-to-Font Image Translation using Convolutional Recurrent Generative Adversarial Networks", *24th International Conference on Pattern Recognition (ICPR)*, 2018, IEEE [\[PDF\]](#)

- Ayan Kumar Bhunia, Abir Bhowmick, **Ankan Kumar Bhunia**, Aishik Konwer, Prithaj Banerjee, Partha Pratim Roy, Umapada Pal, “Handwriting Trajectory Recovery using End-to-End Deep Encoder-Decoder Network”, *24th International Conference on Pattern Recognition (ICPR)*, 2018, IEEE [[PDF](#)]
- Aishik Konwer, Ayan Kumar Bhunia, Abir Bhowmick, **Ankan Kumar Bhunia**, Prithaj Banerjee, Partha Pratim Roy, Umapada Pal, “Staff line Removal using Generative Adversarial Networks”, *24th International Conference on Pattern Recognition (ICPR)*, 2018, IEEE (Oral) [[PDF](#)]

SCIENTIFIC
RESEARCH
EXPERIENCE

- MAY, 2019 **Mitacs Globalink Internship** [[Certificate](#)]
TO *Research Intern at University of Manitoba, Canada* [[GitHub](#)]
AUGUST, 2019
- **Title:** “Flexible deep learning models in computer vision ”
 - **Advisor:** Dr. [Yang Wang](#) , Associate Professor.
 - **Description:** I worked on one-shot scene-specific crowd counting that learns to adapt already trained model to a specific test-scene based on a single example. During finetuning different layers are frozen based on the decision of a Policy network.
- JUNE, 2018 **Robert Bosch, Bangalore, India**
TO *Research Intern at Computer Vision Lab, RTC Department* [[Certificate](#)]
JULY, 2018
- **Title:** “Synthetic to Photo-realistic Image Generation” [[GitHub](#)]
 - **Advisor:** Dr. [Amit Arvind Kale](#), Principal Senior Expert
 - **Description:** I worked on various domain adaptation techniques to improve the performance of state-of-the-art semantic segmentation methods by leveraging large synthetic datasets.
- MAY, 2017
- **Advisor:** Prof. [Partha Pratim Roy](#), Ph.D.
- TO Dept. of Computer science, IIT Roorkee, India.
- PRESENT
- **Research Directions:** Machine learning, computer vision, pattern recognition, document analysis, visual Scene understanding etc
 - **Collaborated with:** Prof. [Umapada Pal](#), CVPR Unit, ISI-Kolkata, Dr. [Alireza Alaei](#), Research Fellow, Griffith University, Australia.

RELEVANT COURSEWORK

* Statistics & Probability	* Linear Algebra	* Signal Processing
* ML & DL Algorithms	* Computer Vision	* Reinforcement learning

FAMILIARITY WITH DL

* CNN/RNN/LSTM	* Auto-encoder	* Transfer Learning
* Semantic Segmentation	* Object Detection	* Attention Mechanism
* Siamese Network	* Triplet Network	* Generative Models
* Domain Adaptation	* Style Transfer	* Image Trans. Models

TECHNICAL SKILLS

- Programming Languages: **Python**, C, MATLAB.
- Deep Learning Framework: **PyTorch**, **Tensorflow**, Keras.
- Mathematics: Linear-algebra, Probability, Statistics, Signal Processing.
- Miscellaneous: OpenCV, OpenAI gym, Numpy, Matplotlib, Pandas, Scikit-Learn.

REFERENCES

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