Aishik Konwer   *Curriculum vitae*

CONTACT INFORMATION
1, Coed Lane.
Stony Brook 11790.
New York, USA.

(+1)-6317471244
Skype-live:konweraishik
akonwer@cs.stonybrook.edu

RESEARCH   Deep Learning, Machine Learning, Predictive Modeling.

COURSEWORK   Computer Vision, Machine Learning, Data Science, Visualization, Human Computer Interaction.

PRESENT   2nd year **PhD** student in CS, **Stony Brook University**
Research Assistant, *Advisor* Dr. Prateek Prasanna

INDUSTRY   Data warehouse developer in Cognizant (Dec'17 - Jul'19).

EDUCATION

Stony Brook University, New York (USA)   2024

- PhD, Computer Science
- CGPA: 3.90/4

Institute of Engineering & Management, Kolkata (India)   2017
University: Maulana Abul Kalam Azad University of Technology
Formerly known as West Bengal University of Technology

- Electronics & Communication Engineering
- DGPA: 8.89/10
- Graduated with Bachelor of Technology (Honours)
- B.Tech Thesis: *'Gender Recognition from Body Images using Part based Model'*

South Point High School, Kolkata (India)   2013
- West Bengal Council of Higher Secondary Education(12th Standard)
- Aggregate: 82.0%

South Point High School, Kolkata (India)   2011
- West Bengal Board of Secondary Education (10th Standard)
- Aggregate: 84.0%

JOURNAL PUBLICATIONS

1. Ankan Kumar Bhunia*, **Aishik Konwer***, Abir Bhowmick, Ayan Kumar Bhunia, Partha Pratim Roy, Umapada Pal, "Script Identification in Natural Scene Image and Video Frame using Attention based Convolutional-LSTM Network", **Pattern Recognition**, Volume 85, Pages 172 - 184, 2019. (DOI:10.1016/j.patcog.2018.07.034). [**PDF**] [**Github**] [***Equal Contribution**] (**I.F.-3.962**)

CONFERENCE PAPERS

1. **Aishik Konwer**, Ayan Kumar Bhunia, Abir Bhowmick, Ankan Kumar Bhunia, Prithaj Banerjee, Partha Pratim Roy, Umapada Pal, "Staff line Removal using Generative Adversarial Networks", *International Conference on Pattern Recognition* (**ICPR**), Beijing, 2018.(DOI:10.1109/ICPR.2018.8546105) [**PDF**] [**Oral**]

2. **Aishik Konwer**, Joseph Bae, Gagandeep Singh, Rishabh Gattu, Syed Ali, Jeremy Green, Tej Phatak, Amit Gupta, Chao Chen, Joel Saltz, Prateek Prasanna "Predicting COVID-19 Lung Infiltrate Progression on Chest Radiographs Using Spatio-temporal LSTM based Encoder-Decoder Network", *Medical Imaging with Deep Learning* (**MIDL**), Lübeck Germany, 2021. [**PDF**]

3. **Aishik Konwer** et.al, "Attention-based Multi-scale Gated Recurrent Encoder with Novel Correlation Loss for COVID-19 Progression Prediction", **MICCAI**, Strasbourg France, 2021. [**Early acceptance top 13%**]

4. Palaiahnakote Shivakumara, **Aishik Konwer**, Abir Bhowmick, Vijeta Khare, Umapada Pal, Tong Lu, "A New GVF Arrow Pattern for Character Segmentation from Double Line License Plate Images", *Asian Conference on Pattern Recognition* (**ACPR**), Nanjing, China, 2017. (DOI:10.1109/ACPR.2017.45) [**PDF**]

5. Sauradip Nag, Ankan Kumar Bhunia, **Aishik Konwer**, Partha Pratim Roy "Facial Micro-expression Spotting and Recognition Using Time Contrasted Feature with Visual Memory", *International Conference on Pattern Recognition* (**ICASSP**), Brighton UK, 2019. (DOI:10.1109/ICASSP.2019.8683737) [**PDF**]

6. 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", *International Conference on Pattern Recognition* (**ICPR**), Beijing, 2018. (DOI:10.1109/ICPR.2018.8546093) [**PDF**]

7. 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", *International Conference on Pattern Recognition* (**ICPR**), Beijing, 2018.

   (DOI:10.1109/ICPR.2018.8545184) [**PDF**]

FAMILIARITY WITH DL		
(i) CNN	(ii) Convolutional LSTM model	(iii) RNN/LSTM
(iv) Prediction model	(v) GANs for Image to Image Trans.	(vi) Seq2Seq
(vii) Siamese Network	(viii) Attention based Model	(ix) VAE
(x) Domain Adaptation	(xi) Semantic Segmentation	(xii) Style Transfer

PRE-PHD RESEARCH EXPERIENCE

SEPT, 2016 to FEB, 2017   Bangla and Oriya Handwritten Text Segmentation, 'Human Behaviour Detection from Handwriting Analysis using Graphology' .
Advisor: Prof. Dr. Umapada Pal , Ph.D.
- Head, Computer Vision and Pattern Recognition Unit.
- Indian Statistical Institute, Kolkata, India.

NOV, 2016 -JUL, 2017   GVF based Character Segmentation from Double Line License Plate Images.
Advisor: Prof. Dr. Palaiahnakote Shivakumara , Ph.D.
- Faculty of CSE Department.
- University of Malaya, Malaysia.

JUL, 2017 to FEB, 2018   Writer Identification for Music Score Images using Deep Learning. Offline to Online based Signature Verification.
Advisor: Prof. Dr. Partha Pratim Roy , Ph.D.
- Department of CSE.
- IIT Roorkee, India.

ACHIEVEMENTS

- Awarded prestigious **PhD Chairman Fellowship** from Stony Brook University, 2019.
- Got NPTEL Elite Certification in Medical Image Analysis, IIT Kharagpur, 2017.
- 1st Prize in Engineering Model-making Competition, NEN 2015.

TECHNICAL
SKILLS

- Programming Languages: C, MATLAB, Python.
- Deep Learning Framework: Tensorflow, Pytorch