

CONTACT	631-747-1244 Stony Brook, NY 11790	aishikkonwer95.github.io akonwer@cs.stonybrook.edu
EDUCATION	Stony Brook University, New York (USA) PhD, Computer Science <i>Advisor: Dr. Prateek Prasanna</i> Institute of Engineering & Management, Kolkata (India) BTech, Electronics & Communication Engineering	2019 - present GPA: 3.92/4 2013 - 2017 GPA: 8.89/10
RESEARCH INTERESTS	Broad Interests. Computer Vision, Deep Learning, Medical Image Analysis Specific Interests. Segmentation, Annotation-efficient learning, Multi-modal Fusion, Missing modalities, Self-supervised learning, Predictive modeling, Radiology	
INDUSTRY EXPERIENCE	Roche - ML Research Intern Worked with Computational Science Pathology team Topic: Annotation-efficient learning algorithm for cell detection and classification Mentor: Christoph Guetter Cognizant - Programmer Analyst Worked with Data warehouse team Topic: Writing shell scripts, SQL, and Informatica transformations for data migration Mentor: Kanchan Patra	May 2022 - Aug. 2022 Dec. 2017 - Jul. 2019
PUBLICATIONS	<ul style="list-style-type: none"> • Aishik Konwer, Joseph Bae, Xuan Xu, Chao Chen, and Prateek Prasanna, “Enhancing Modality-Agnostic Representations via Meta-Learning for Brain Tumor Segmentation”, 2022. (<i>Under Review</i>) • Aishik Konwer, Xuan Xu, Joseph Bae, Chao Chen, and Prateek Prasanna, “Temporal Context Matters: Enhancing Single Image Prediction with Disease Progression Representations”, <i>Computer Vision and Pattern Recognition (CVPR)</i>, 2022. [PDF][Oral] • Aishik Konwer, Chao Chen, and Prateek Prasanna, “Lesion segmentation and genomic characterization of brain cancer patients from incomplete MR sequences”, <i>Radiology Society of North America (RSNA)</i>, 2022. (Abstract) [Oral] • Aishik Konwer, Prateek Prasanna, “Clinical outcome prediction in COVID-19 using self-supervised vision transformer representations”, <i>SPIE Medical Imaging</i>, 2022. [Oral] • Aishik Konwer, Joseph Bae, Gagandeep Singh, Rishabh Gattu, Syed Ali, Jeremy Green, Tej Phatak, and Prateek Prasanna, “Attention-Based Multi-scale Gated Recurrent Encoder with Novel Correlation Loss for COVID-19 Progression Predictions”, <i>Medical Image Computing and Computer-Assisted Intervention (MICCAI)</i>, France, 2021. [PDF] • 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”, <i>Medical Imaging with Deep Learning (MIDL)</i>, Germany, 2021. [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”, <i>International Conference on Pattern Recognition (ICPR)</i>, Beijing, 2018.[PDF] [Oral] • 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”, <i>Pattern Recognition</i>, 2019. [PDF] • Sauradip Nag, Ankan Kumar Bhunia, Aishik Konwer, Partha Pratim Roy “Facial Micro-expression Spotting and Recognition Using Time Contrasted Feature with Visual Memory”, <i>International Conference on Pattern Recognition (ICASSP)</i>, Brighton UK, 2019. [PDF] 	

- 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. [\[PDF\]](#)

PRE-PHD RESEARCH EXPERIENCE	IIT Roorkee - Research Intern Worked with Parimal Lab Topic: Writer identification and staff line removal from music score images Mentor: Partha Pratim Roy Indian Statistical Institute, Kolkata Worked with CVPR unit Topic: Handwritten text segmentation, GVF-based license character segmentation Mentor: Umapada Pal	2017 - 2018 2016 - 2017
INVITED TALKS	<i>“Meta-Learning in Digital Pathology”</i> Roche Advanced Analytics Network Host: Qinle Ba, Julie Ta <i>“Modality-Agnostic Network for Brain Tumor Characterization with Missing Modalities”</i> Graduate Research Day, Stony Brook University Host: Computer Science Dept. <i>“Predicting Disease Trajectory on Medical Imaging”</i> Siemens Healthineers Host: Halid Yerebakan <i>“Basics of Multitask, Transfer and Meta-Learning”</i> Imagine Lab, Biomedical Informatics Dept. Host: Prateek Prasanna <i>“How to utilize limited datasets? Can temporal imaging help”</i> Applied Maths and Stats Dept., Stony Brook University Host: Wei Zhu	Nov. 2022 Oct. 2022 May 2022 Apr. 2022 Oct. 2021
AWARDS	<ul style="list-style-type: none"> • Travel grant, Computer Vision and Pattern Recognition (CVPR), 2022 • Conference support, SPIE Medical Imaging, 2022 • Professional Development Fund, SUNY Research Foundation, 2021 • Prestigious PhD Chairman Fellowship, Stony Brook University, 2019 • NPTEL Elite Certification in Medical Image Analysis, IIT Kharagpur, 2017 • 1st Prize in Engineering Model-making Competition, NEN 2015 	
REVIEWER	CVPR, ECCV, MICCAI, BMVC, Medical Image Analysis, ISBI, MIDL, ML4MI	
TEACHING	<ul style="list-style-type: none"> • ISE 305 Database Design and Practice (Fall 2019) • CSE 305 Principles of Database Systems (Spring 2020) • CSE 512 Machine Learning (Summer 2020) 	
COURSEWORK SKILLS	Computer Vision, Machine Learning, Data Science, Visualization, Human Computer Interaction. Python, C++, Matlab, SQL, Pytorch, Tensorflow, Numpy, OpenCV, \LaTeX	