Tanveer Hannan

Webpage

in LinkedIn

Google Scholar

GitHub

Research Interest

Machine Learning

Deep Learning, Multi-Modal Learning, Self-Supervised Learning, Unsupervised Clustering, Large Language Modeling, Natural Language Processing.

Computer Vision

Video Understanding, Vision-Language Modeling, Long-Range Video Modeling, Video Retrieval, Autonomous Driving, Reliable AI, Multi-Object Tracking.

Education

2022 - Present

Ph.D. in Computer Science, 3rd Year, LMU Munich

Advisor: Thomas Seidl, Gedas Bertasius

Teaching: Connecting Language to Vision, Deep learning and Artificial Intelligence,

Knowledge Discovery and Data Mining

2019 - 2021

M.Sc. in Data Science

LMU Munich CGPA 1.06/4.00 (best 1.0 out of 4.0)

2014 - 2018

B.Sc. in Computer Science and Engineering

Bangladesh University of Engineering and Technology

CGPA 3.79/4.00 (3.93 final 2 years)

Experience

Jul 24 – Dec 24

Research Scientist Intern, *Huawei Research Center*, Munich, Germany

Text-to-Video Retrieval for Autonomous Driving, Reliable AI

Jul 21 - Dec 21

Research Intern, Hensoldt Analytics, Munich, Germany

Computer Vision, Video Segmentation & Tracking

Oct 20 – Apr 21

Research Intern, *Siemens*, Munich, Germany

Reinforcement Learning, Optimization

Nov 18 - Aug 19

Software Engineer *Helical Inc.*, Dhaka, Bangladesh

Research Publications

- 8 ReVisionLLM: Recursive Vision-Language Model for Temporal Grounding in Hour-Long Videos T Hannan, M. Islam, J. Gu, T Seidl, G. Bertasius In CVPR 2025. [pdf]
- 7 RGNet: A Unified Retrieval and Grounding Network for Long Videos T Hannan, M. Islam, T Seidl, G. Bertasius In ECCV 2024. [pdf]
- 6 GRAtt-VIS: Gated Residual Attention for Auto Rectifying Video Instance Segmentation T Hannan*, R Koner*, M Bernhard, S Shit, B Menze, V Tresp, M Schubert, T Seidl In ICPR 2024 (ORAL). [pdf]
- 5 InstanceFormer: An Online Video Instance Segmentation Framework R Koner*, T Hannan*, S Shit, S Sharifzadeh, M Schubert, T Seidl, V Tresp In AAAI 2023. [pdf]
- 4 Context Matters: Leveraging Spatiotemporal Metadata for Semi-Supervised Learning on Remote Sensing Images

M Bernhard, **T Hannan**, N Strauß, M Schubert In *ECAI* 2024. [pdf]

- Box Supervised Video Segmentation Proposal Network
 T Hannan*, R Koner*, J Kobold, M Schubert
 In Irish Machine Vision and Image Processing Conference (IMVIP) 2022. [pdf]
- Prediction of Soft Proton Intensities in the Near-Earth Space Using Machine Learning E. Kronberg, **T Hannan**, et al. In *The Astrophysical Journal 921* (1). [pdf]
- 1 COVID-DenseNet: A Deep Learning Architecture to Detect COVID-19 from Chest Radiology Images M. Islam*, **T. Hannan***, L. Sarker, Z. Ahmed In *International Conference on Data Science and Applications (ICDSA)* 2022. [pdf]

Selected Projects

PoliceBox

H-Attention Designing a Hierarchical Attention based Transformer network for End-to-end Object Detection.

RL-Optimizer Customized Reinforcement Learning Environments to optimize the reorder point to minimize both inventory and stockout costs.

UniShare An academic resource-sharing platform developed using PHP, CodeIgniter framework, MySql, JavaScript, HTML, CSS, and XAMPP server.

An interactive server-client system developed using Java Swing, JavaFX, MySql, and Socket Programming to manage services provided by the police efficiently.

Skills

ML tools PyTorch, TensorFlow, Keras, Jupyter, Distributed training.

Coding Python, Java, C, C++, Java HTML, XML, PHP, JavaScript, 80x86 Assembly.

Misc. Lex, Yacc, Shell Script, LaTeX, Git.

Miscellaneous Experience

Awards and Honors

2018 **9th place**. Bengali Handwritten Digit Recognition Challenge, Kaggle Competition 2018.

2016 **Semi-finalist** in University Debate Championship

2014-16 University Merit List, Bangladesh University of Engineering and Technology.

Finalist in the 4th Stamford National Debate Championship

2012 Champion of Inter-School Debate Competition

Reviewer

2022-24 Conference: CVPR, ECCV, NeurIPS, ICDE, ICDM