

SHEHRYAR MALIK

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OBJECTIVE

To understand and express intelligence mathematically – which is the ultimate objective of the field of artificial intelligence.

EDUCATION

Lahore University of Management Sciences, Lahore Masters of Science • Computer Science	September 2019 – May 2021
University of Engineering and Technology, Lahore Bachelor of Science • Electrical Engineering	August 2015 – May 2019
Aitchison College, Lahore A Levels	August 2013 – May 2015

WORK EXPERIENCE

Research Assistant Center of Artificial Intelligence and Computational Science, Information Technology University, Lahore. Research Advisor: Dr. Ali Ahmed.	July 2019 – Present
Research Intern Centre for Language Engineering, Khwarizmi Institute of Computer Science, Lahore.	July – September 2018
Research Intern Bio-Inspired Simulation and Modelling of Intelligent Life Laboratory, Information Technology University, Lahore.	July – August 2018
Research Intern Internet of Things Laboratory, Khwarizmi Institute of Computer Science, Lahore.	May – August 2017

PUBLICATIONS

S. Malik, U. Anwar, A. Ahmed, and A. Aghasi. Learning to solve differential equations across initial conditions. In *ICLR 2020 Workshop on Integration of Deep Neural Models and Differential Equations*, 2020. URL arxiv.org/abs/2003.12159

PROJECTS

Urdu Handwriting Recognition using Deep Learning Senior Project • Advisor: Dr. Ubaid Ullah Fayyaz	September 2018 – May 2019
<ul style="list-style-type: none">Prepared a dataset containing 15,164 lines of Urdu handwritten text written by 490 different writers and containing 13,497 trigrams, 1,674 bigrams and 61 unigrams.Implemented and trained a simple CNN-LSTM-CTC architecture and a more complicated Bahdanau attention-based architecture in TensorFlow.Incorporated a trigram-based language model with Backoff Kneser-Ney smoothing.Achieved accuracies of up to 91% on the test set.For more details, visit https://shehryar-malik.github.io/theses/sp.	

SKILLS

- Programming languages: Proficient in Python, MATLAB, LaTeX and Markdown. Have also used/studied C, Java, Verilog, Assembly, HTML, CSS, PHP and SQL occasionally.
- Natural Languages: Proficient in English and Urdu. Have a (very) rudimentary understanding of French and Arabic.
- Libraries: Extensively used NumPy, TensorFlow and Matplotlib.

SELECTED COURSES

- Artificial Intelligence and Machine Learning**
- Deep Multi-Task and Meta Learning (Stanford CS 330) [on-going]
 - Deep Reinforcement Learning (UC Berkeley CS294-112)
 - Natural Language Processing with Deep Learning (Stanford CS224n)
 - Convolutional Neural Networks for Visual Recognition (Stanford CS231n)
 - Machine Learning (Stanford CS229)
 - Introduction to Artificial Intelligence (MIT 6.034)

Mathematics

- Convex Optimization - I

- Probability and Statistics
- Linear Algebra

Signal Processing

- Analog and Digital Communications
- Digital Signal Processing
- Signals and Systems