

Safia Fatima

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EDUCATION

AI for Medicine Specialization Coursera	August 2020-To Date
M.Sc. Computer Science FAST NUCES, Pakistan – GPA: 3.44/4.00	August 2016-January 2019
B.Sc. Computer Science FAST NUCES, Pakistan – GPA: 3.15/4.00	August 2012-May 2016

PUBLICATIONS

Evaluation of Multi-Modal MRI Images for Brain Tumor Segmentation (Published)	February 2020
<ul style="list-style-type: none">• Conference: ICET'19 The 15th International Conference on Emerging Technologies, Pakistan• Presentation Schedule: Peshawar, Pakistan, December 3rd, 2019	

SUPERVISION OF UNDERGRAD PROJECTS

Course Content Predictor Based on Industrial Trends	January 2021-To Date
Deepfake Video Detection <ul style="list-style-type: none">• Tools/Libraries: DCGAN, CNN, Python, Keras, TensorFlow, Streamlit	September 2020-July 2021
Stock Market Data Analysis and Prediction using Time Series (GitHub) <ul style="list-style-type: none">• Tools/Libraries: Arima, LSTM, Python, Keras	September 2020-July 2021

RESEARCH PROJECTS

Evaluation of Multi-Modal Brain MRI Images for the Localization of Glioblastomas (M.Sc. Thesis)	January 2018-January 2019
<ul style="list-style-type: none">• A method that incorporates a deep learning-based model U-Net to address brain tumor localization.• Utilizing BRATS2015 as the primary dataset for Brain MRI Images.• Using the same architecture for the evaluation of individual modalities.	

WORK EXPERIENCE

Odetta.ai, Remote – Python Scripter	August 2021-To Date
<ul style="list-style-type: none">• Started working remotely as a Python Scripter at a US-based company.• Working on projects related to data collection, data analytics, and web scraping.	
FAST-NUCES, Peshawar – Lecturer	August 2020-To Date
<ul style="list-style-type: none">• Promoted under Computer Science Department as a Lecturer.• Teaching courses including computer architecture, software design & analysis and object-oriented programming.• Supervising CS undergraduate projects in the fields of computer vision, deep learning, and time series analysis.	
FAST-NUCES, Peshawar – Lab Instructor	January 2018–July 2020
<ul style="list-style-type: none">• Worked under Computer Science Department as a Lab Instructor.• Involved in teaching courses including Introduction to Computing, Databases, and Digital Logic Design.• Gained skills in SQL, Python, and C++ programming languages.	

KEY PROJECTS

Bron Kerbosch Algorithm (GitHub)	December 2017
<ul style="list-style-type: none">• Code for implementing the BK algorithm to show all maximal cliques and one maximum clique from within set of maximal cliques.• Implemented in C language using Graph Theory concepts.	
Gene Ontology Classification of Protein Sequence Using Fully Connected Neural Networks (GitHub)	January 2018
<ul style="list-style-type: none">• Annotation of protein sequences with gene ontology (GO) classes using deep neural networks.• Experimented on yeast dataset using python and Tensorflow.	
Data Dissemination for Bioinformatics: An Agent Migration Approach (FYP-BSCS)	May 2016
<ul style="list-style-type: none">• An agent migration approach to fill in the retrieving remote data in a low-quality network environment, especially unstable mobile computing environments and do the client-side computation on the server end.• User will be able to see his/her activity graphically visualized logs and statistics on their smartphone screen.• The proposed approach can also overcome the resource limitation of mobile terminals and release mobile users from keeping online persistently.	

TECHINICAL SKILLS

Programming Languages: JAVA, C++/C, Python, Bash
Machine Learning: Supervised/Unsupervised Learning, Generative Models, Reinforcement Learning, Natural Language Processing
Analytics: Jupyter, SQL, Excel
Tools/Libraries: PyTorch, OpenCV, Tensorflow, Keras, Sklearn, Git

KEY ACHIEVEMENTS & AWARDS

Faculty Head ACM-Student Chapter - NUCES, Pakistan	January 2020-To Date
2x Bronze Medal - NUCES, Pakistan	August 2012-May 2016
Dean's List Certification Holder -NUCES, Pakistan	August 2012-May 2016