Contact

yumnah.hasan1@gmail.com

www.linkedin.com/in/yumnah-hasan (LinkedIn)

Top Skills

Literature Reviews
Statistical Analysis
Fault Finding

Honors-Awards

Travel Grant
Travel Grant
Dean's List
Prime Minister Laptop
Scholarship

Publications

Rafay A., Hasan Y., Iqbal A. (2019) Recognition of Fingerprint Biometric System Access Control for Car Memory Settings Through Artificial Neural Networks. In: Arai K., Kapoor S., Bhatia R. (eds) Advances in Information and Communication Networks. FICC 201

Zafar T., Laila A., Hasan Y. (2019) Analyzing the Customer Attitude Towards an Intention to Receive SMS Marketing via Missed Call Subscription. In: Arai K., Kapoor S., Bhatia R. (eds) Intelligent Computing. SAI 2018. Advances in Intelligent Systems and Co

Interpretable Solutions for Breast Cancer Diagnosis with Grammatical Evolution and Data Augmentation.

STEM Rebalance: A Novel Approach for Tackling Imbalanced Datasets using SMOTE, Edited Nearest Neighbour, and Mixup

Parveen Z., Hasan Y., Alam A., Abbas H., Arif M.U. (2019) Rice Classification Using Scale Conjugate Gradient (SCG) Backpropagation Model and Inception V3 Model. In: Arai K., Kapoor S., Bhatia R. (eds)

Yumnah Hasan

PHD Student @University of Limerick | Machine Learning @CRT SFI
Limerick, County Limerick, Ireland

Summary

With a passion for delving into the intricacies of algorithms and a penchant for crafting innovative solutions, I'm Yumnah Hasan, adept in computer vision and machine learning. My journey traverses academia and industry, honing my expertise in developing robust algorithms for detection and classification systems.

Currently pursuing a PhD in Artificial Intelligence at the University of Limerick, I build upon my master's in Electrical Engineering from Bahria University, Pakistan, and a bachelor's from FAST-NU. My academic pursuits have culminated in a series of impactful publications in fundamental AI/ML research.

As a Senior Lab Engineer at Bahria University, I mentored students through final year projects, imparting practical skills in courses ranging from Linear Control Systems to Industrial Automation. Now, as a Teaching Assistant at the University of Limerick, I guide students through the intricacies of computing and web development, fostering their growth and understanding.

Proficient in problem-solving, I leverage logical reasoning and innovative approaches to tackle complex issues. My collaborative spirit shines through my ability to work seamlessly with cross-functional teams, leading to successful project completions. Additionally, my expertise in model optimization, particularly in computer vision techniques, underscores my commitment to driving impactful solutions.

Equipped with proficiency in deep learning, image segmentation, object detection and classification, and data analysis, I thrive in Python, TensorFlow, and PyTorch environments. My research contributions have been recognized through publications like "Interpretable Solutions for Breast Cancer Diagnosis" and "A Convolutional Neural Network Based Patch Classifier Using Mammograms," among others.

Beyond academia, I've garnered accolades such as the Merit Scholarship by CRT-SFI, Ireland, and the President TnC role at FAST-NU's Co-curricular society. My passion for algorithm development is matched only by my enthusiasm for exploring new destinations and navigating diverse driving environments.

Let's connect to explore opportunities for collaboration, innovation, and driving impactful change in the realms of computer vision and machine learning.

Experience

Cook Medical
Summer Intern
June 2024 - Present (3 months)
Limerick, County Limerick, Ireland

University of Limerick
PHD Student
April 2021 - Present (3 years 5 months)
Limeirck, Ireland

My current work is on the “Multi-parametric segmentation and detection of breast cancer from mammographic images using Deep Learning Algorithms and Grammatical Evolution”. I am working to develop a novel system that provides early and accurate diagnosis from mammographic images to reduce high mortality rate among females.

Electrical Engineering Department Bahria University
Senior Lab Engineer
January 2015 - September 2021 (6 years 9 months)
Karachi

• Overseeing operations and mentoring students through Final Year Projects.
• Instructed diverse lab courses, including Linear Control Systems, Industrial Automation, and Basic Electronics, fostering practical skills.
• Collaborated with faculty on research projects, offering technical expertise and contributing to experiment design and equipment enhancement.

Fluid System International Pvt Ltd (FSIPL)
Application Engineer

September 2014 - January 2015 (5 months)
Karahchi

•Provide best system solutions on the basis of reading technical specifications.
•Critical Analysis of the performance curves of different Products.
•Direct communication with the principal of ITT and Xylem.
•Production selection on the basis of customer's requirement.
•Observing the efficiency of different pumps, motors, solar pumps and spares.
•Deals with the clients of ITT and respond to their queries.

Think n Create (TNC)
President
September 2013 - June 2014 (10 months)
Fast KHI

• Led co-curricular student society.
• Organized academic events including circuit design competition, robo war, alumni series, and Fastech which is an inter-city competition event.

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KESC
Intern
June 2012 - August 2012 (3 months)

• Worked in the Rapid Response (RRC) department (Rapid Response Center)
• and did fault analysis.
• Visited substations and grid stations and transformer, workshops, and observed on-site faults repairing.
• Worked on gap analysis and proposed solutions based on the investigation performed.

Education

University of Limerick
Doctor of Philosophy - PhD, Artificial Intelligence · (April 2021 - April 2025)

Bahria University
Master's degree, Electrical Engineering · (2015 - 2017)

National University of Computer and Emerging Sciences
Bachelor of Science (BS), Electrical Engineering · (2010 - 2014)