Bibi Qurat-ul-Ain

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Quetta, Pakistan

EDUCATION

Masters in Computer Science and Technology

Sep 2019 – Dec 2023

Dalian University of Technology, China

CGPA: 3.73/4.00

Bachelor of Science (Hons), Computer Science

Sep 2014 – Dec 2018

Baluchistan University of IT, Engineering & Management Sciences, Quetta

CGPA: 3.84 / 4.00

HSSC / FSc, Pre-Engineering

Aug 2012 – Aug 2014

Hassan Musa Girls Degree College, Quetta

Division: 1st

SSC / Matric, Science

Mar 2010 – Jul 2012

Ummat Public School, Quetta

Division: 1st

PROFESSIONAL EXPERIENCE

Lecturer

Sep 2018 – Mar 2019

Postgraduate Girls College, Quetta Cantt, Pakistan.

- Involved in teaching Computer fundamentals as a major subject and also responsible for teaching C++ and Database basics.
- Serve as a member on several committees (such as discipline and examination)

Teaching Assistant

2017 - 2018

Department of Computer Science,

BUITEMS, Quetta, Pakistan.

- Observed students to provide feedback to teachers regarding potential learning blocks and opportunities for support
- Delivered tutoring sessions covering advanced database systems and web applications development to undergraduate students in small group and one-on-one settings
- Provided timely response to students questions related to the course and guided them in understanding the material

TECHNICAL SKILLS

Programming languages: C/C++, Python,HTML,CSS,PHP

Databases: MySQL, SQLite

Operating Systems: Linux/Unix and Windows **Framework:** ASP.Net, Django, XAMPP

Internet of Things: Sensors, Beacons, Raspberry pi, Arduino

ACHIEVEMENTS

- Merit scholarship for Undergraduate studies, BUITEMS, Aug 2014 Dec 2018
- Awarded Balochistan Endowment Fund (BEEF) Scholarship for being in Top 5 students, 2018
- National Finalist Microsoft Imagine Cup, 2018
- Winner of undergraduate research colloquium (cash prize Rs. 10,000) in the "Best Commercial Impact Category", 2018

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RESEARCH & SEMESTER PROJECTS

Pneumonia Detection using Deep Learning

Conducted pioneering research in automated pneumonia detection, focusing on the challenges associated with manual interpretation of chest radiographs The research aimed to collect chest dataset and label them manually to be trained by deep learning models. Utilized a transfer learning-based approach with lightweight models, including SSD MobileNet V2 and variants, achieving 95% accuracy rates and 85% mAP scores. The research contributes valuable insights to the field, providing a solution for dataset imbalance and emphasizing the potential deployment of lightweight models on cost-effective medical devices, particularly beneficial in resource-limited settings.

Personalized Product Recommendation Engine

A Mobile Application that works as a shopping assistant for users. The project aimed to provide context-based recommendation to the users. Beacons were used to identify user's location and products recommendations (calculated using collaborative filtering algorithms) were provided to the users.

Blood Donor

A Mobile Application that help users find nearby blood banks and also blood donor with their contact numbers. The project aimed to help users find blood donor easily who have already registered themselves with their name, contact numbers, location and blood type.

Tuition Center

A management system for a tuition center, It allowed admin to add, delete or modify students and teachers record. Also, it allowed to keep track to students who have paid their fees and courses taught by teacher.

PUBLICATIONS

Quratulain et al. "Efficient Pneumonia Detection in Chest X-ray Images: Leveraging Lightweight Transfer Learning for Improving Accuracy and Practicality". ESSE'23, December 1-3, 2023, Napoli, Italy.

ON CAMPUS INVOLVMENT

- Served as a volunteer in BUITEMS ACM Student Chapter, 2016 2018
- Attended 1-week boot camp held by Herdomain, Islamabad, 2018
- Active participation in 3rd invention to innovation summit, Balochistan, 2018

MISC

Languages: English, Urdu

Professional Affiliations: Student Member of Association for Computing Machinery (ACM), Student Member of Institute of Electrical and Electronics Engineers (IEEE) **Other Qualifications**: Diploma Course in Web Development from AGT academy, Islamabad, Pakistan. January March, 2016, Certified for attending 1-week design thinking session.

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