## Curriculum Vitae

### 1. Personal details and date of the CV

- Siddeeq
- Shahbaz
- https://orcid.org/0009-0003-9030-8841
- March 18, 2024

## 2. Degree

MS Computer Science and Technology (Sep 2018 – Mar 2021)

Donghua University, Shanghai, China

**Thesis:** Customized ResNet-Based Neural Model for BIRADS Classification of Mammographic Images

To reach this objective of precise BI-RADS classification, proposed a methodology with a customized ResNet- based neural network (RN-BCNN). In which, ResNet neural network is used as the building block of the model and its symmetry is optimized between depth and width for medical images. Elastic deformation technique and pyramids of scale were incorporated into the network architecture to handle the problem of small training group and unbalanced class distribution. Extensive experiments including training and comparison with other deep neural network structures were performed on INBREAST dataset. The proposed methodology reached the classification accuracy of up to 85.9%.

Final grade: 80.46/100

Address: 849 Zhongshan W Rd, Changning District, 200051, Shanghai, China

Website: <a href="https://english.dhu.edu.cn/">https://english.dhu.edu.cn/</a>

BS Computer Science (Sep 2013 - Jul 2017)

Government College University Faisalabad, Faisalabad, Pakistan

My final year project is web-based application that is "Location Based Advertisement". Auto track location and display the nearby locations which you want. Using many of the same features most have come to expect in other map sites like Google Map and yahoo Map. To develop this project I have used PHP, MySQL, JavaScript, jQuery, Ajax, and XML for analysis.

Final grade: 3.76/4.00

Address: Kotwali Rd, Gurunanakpura, 38000, Faisalabad, Pakistan

Website: https://gcuf.edu.pk/

# 3. Languages

Urdu (Native language)

English

**LISTENING:** B2 **READING:** C1 **WRITING:** C1 **SPOKEN PRODUCTION:** B2 **SPOKEN INTERACTION:** B2 *Levels:* A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## 4. Previous Work Experience

Researcher (Mar 2023 - Nov 2023)

Free University of Bozen-Bolzano, Bolzano, Italy

- Worked on an interdisciplinary research project on Genome Wide Association Studies (GWAS) in collaboration with EURAC Research. The aim of the project was to design and develop efficient data models, index structures and algorithms to support the dynamic retrieval of significant associations between genetic variants and phenotypes for subsets of the data. The developed solutions should significantly reduce the computational burden of association calculations while maintaining high accuracy, thereby supporting explorative data analytics.
- During the time working in the project, I first did a literature review and got familiar with basic concepts on GWAS. Later I implemented an algorithm to compute associations between genetic variants and phenotypes. In this task I have shown good coding skills in Python.

#### Senior Software Engineer (Jul 2021 – Jan 2023)

Dexpel, Lahore, Pakistan

- Maintenance of dexpel.pk and dexpel.com
- Various WordPress and Laravel projects
- Worked as CTO in omniengine.pk, getomniengine.com

#### **Software Engineer** (Aug 2020 – Jan 2023)

The Simplicity Corp, Dongguan City, China

- Maintenances the Odoo portal of clients.
- Customization according to client requirement in Odoo.
- Creating new dashboard reports.
- Developing BI portal in Laravel (PHP) for beautiful BI reports of Odoo using Odoo API.

#### **Software Developer** (Feb 2017 – Aug 2018)

VirtueNetz, Lahore, Pakistan

- Involved in developing CodeIgniter and WordPress projects, showcasing expertise in these frameworks and delivering high-quality solutions.
- Additionally, I served as a dedicated developer for an Open Cart project, demonstrating a
  deep understanding of e-commerce systems and contributing to the successful
  implementation and maintenance of the project.

#### Front-End and PHP Developer – Part time (Aug 2014 – Mar 2015)

Dzine Media, Faisalabad, Pakistan

• In Dzine Media I have worked on PHP projects but mostly worked on web design tasks and near to 30 Web designs I have completed at that time span.

#### 5. Research Publications

- Siddeeq, Shahbaz, Jiyun Li, Hafiz Muhammad Ali Bhatti, Arslan Manzoor, and Umar Subhan Malhi. "Deep learning RN-BCNN model for breast cancer BI-RADS classification." *In Proceedings of the 2021 4th International Conference on Image and Graphics Processing, pp. 219-225. 2021.*
- Bhatti, Hafiz Muhammd Ali, Jiyun Li, Shahbaz Siddeeq, Abdul Rehman, and Arslan Manzoor. "Multidetection and segmentation of breast lesions based on mask rcnn-fpn." In 2020 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), pp. 2698-2704. IEEE, 2020.

- Manzoor, Arslan, Qiao Pan, Hadiqa Jalil Khan, Shahbaz Siddeeq, Hafiz Muhammd Ali Bhatti, and Mulubrhan Ayalew Wedagu. "Analysis and detection of lung sounds anomalies based on NMA-RNN." In 2020 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), pp. 2498-2504. IEEE, 2020.
- Malhi, Umar Subhan, Junfeng Zhou, Cairong Yan, Abdur Rasool, Shahbaz Siddeeq, and Ming Du. "Unsupervised Deep Embedded Clustering for High-Dimensional Visual Features of Fashion Images." Applied Sciences 13, no. 5 (2023): 2828.

### 6. Skills

- LANGUAGES: HTML, CSS, Javascript & Jquery, PHP, AJAX, JSON, Python, Node.Js, React.Js, AngularJS, Vue.js
- FRONT-END WEB FRAMEWORKS: Bootstrap, Semantic-UI
- DATABASE: MySQL, MySQLi, PostgreSQL
- MVC (Web Frameworks): Laravel, Codeigniter
- GRAPHIC DESIGNING: Adobe Photoshop, Adobe Premiere
- ODOO DEVELOPMENT (Python): ODOO (ERP Management System), Odoo ERP Module Development
- Artificial Intelligence and Machine Learning: TensorFlow / Deep learning / Machine learning / Keras / Pandas / NumPy / Generative Al, LLM
- Software Engineering: Empirical software Engineering / Software Development and Software Engineering

# 7. Awards & Scholarships

Sep 2019 Certificate of the Special Honor (Culture Festival)

Apr 2019 Certificate of Excellence (SCISA)

2018-2021 Chinese Government Scholarship (CSC) for Master (MS)

I got selected in Chinese Government Scholarship for Master Degree in Computer Science & Technology when I got admission in Donghua University, Shanghai, China.

Feb 2015 Prime Minister Laptop Award

I got selected for Prime Minister Laptop Award in undergraduate Study.

2014-2017 HEC Need Based Scholarship for Bachelor (BS)

I got Higher Education Commission (Pakistan) need based scholarship for 3 years in undergraduate study when I was studying in Government College University Faisalabad.

### 8. Referees

 Prof. Dr. Muhammad Kashif Hanif Department of Computer Science Government College University Faisalabad (GCUF)

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 Assistant Prof. Dr. Muhammad Umer Sarwar Department of Computer Science Government College University Faisalabad (GCUF)

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Phone: (+92) 3006648532