



Sarang Shaikh

Date of birth: 09/12/1992 | **Nationality:** Pakistani | **Gender:** Male | **Phone number:** (+47) 92041857 (Mobile) | **Email address:** sarang.shaikh@ntnu.no | **Email address:** shaikh_sarang@hotmail.com | **Website:** <https://www.ntnu.edu/employees/sarang.shaikh> | **Website:** <https://github.com/SarangShaikh201> | **Website:** <https://scholar.google.com/citations?user=5ZbANBYAAAAJ&hl=en> | **LinkedIn:** <https://www.linkedin.com/in/sarang-shaikh-53437884/> | **WhatsApp Messenger:** +923352383628 | **Skype:** sarang.shaikh76 | **Address:** Kirkegata 4, 2821, Gjøvik, Norway (Home)

ABOUT ME

I received my master's degree in computer science from Sukkur IBA University, Pakistan, in 2020. I am currently pursuing the Ph.D. degree with the Department of Information Security and Communication Technology, Norwegian University of Science and Technology (NTNU), Norway. Prior to joining NTNU University, I was employed as a Visiting Lecturer with Sukkur IBA University. I am the author of several articles published in international journals. My research interests include applied research in the field of artificial intelligence, NLP, machine learning, deep learning, and learning technologies. I also served as a Reviewer for IEEE ACCESS.

WORK EXPERIENCE

10/02/2021 – CURRENT Gjøvik, Norway

PHD RESEARCHER NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY (NTNU)

Dept. of Information Security and Communication Technology

Part of an EU funded project - METICOS (<https://meticos-project.eu/>)

Subjects Studied: COINS Summer School, Research Ethics, Scientific Communication, Real-time AI for robotics and simulated environments, Advanced Discrete Event Simulation Methodology, Quality in Academic Research

Contributed to METICOS project deliverables

01/02/2020 – 25/02/2021 Lugano, Switzerland

FREELANCE MACHINE LEARNING ENGINEER ROBOTIA LTD

- Web Scraping, Semantic Search & API Development
 - Compiled financial companies data for semantic query search analysis by performing web scraping in Python using Selenium, BeautifulSoup on different platforms (i.e: MarketScreener, MarketInsider, Wikipedia, Google)
 - Supervised model development for qualitative and quantitative query classification
 - Worked on different word embeddings to see their effect in semantic search analysis
 - Performed variety of tasks using NLTK and Spacy API for text pre-processing, keyword extraction and synonyms extractions
- Data Visualization
 - Worked on dashboard and story boards developments in Tableau
 - Helped the different users to extract and understand insights from data using Tableau

01/01/2019 – 30/06/2019 Karachi, Pakistan

INSTRUCTOR (COMPUTER SCIENCE) HABIB UNIVERSITY

- Conduct labs as assigned by departments for major subjects like programming, data structures, natural language processing
- Conducted UML lab sessions with assistance to course instructor for Software Engineering course.
- Conducted NLP workshop with assistance to course instructor for Natural Language Processing course.
- Provide academic support for students by conducting group as well as individual sessions for explaining major course relevant topics.

- Appointed at Dept. of Computer Science
- Taught information technology related subjects to first year BS(CS) students
- Followed, ABET accreditation course formats for teaching, preparing course materials and grading schema.

- Worked under the supervision of Prof. Dr. Sher Muhammad Daudpotta. (Professor, Director QEC. Sukkur IBA University)
- Developed "Aspect Based Sentiment Analysis System for Teacher's/Course Evaluation" for QEC Dept. to assist them in automatic analysis of comments taken from students
- Worked on literature review of major research areas to make research background in data mining, big data analytics, natural language processing
- Assist my supervisor in major MS courses related to data mining, deep learning and big data analytics for some activities related to lab arrangements, class arrangements, etc
- Worked on two publications related to video mining and natural language processing

- Managed creative projects from concept to completion while managing outside vendors.
- Consistently met deadlines and requirements for all production work orders.
- Built application platform foundation to support migration from client-server product lines to enterprise architectures and services.
- Coordinated with systems partners to finalize designs and confirm requirements.
- Projects Developed -->
 - <http://kangaads.com/>
 - <https://soematerialscom.ipage.com/>
 - <https://rootsandritualsbeauty.com/>

● EDUCATION AND TRAINING

Website <https://www.ntnu.edu/gjovik>

- Research Methods, Advanced Data Mining, Multimedia Data Mining, Big Data Analytics

Website <https://www.iba-suk.edu.pk/> | **Field of study** Data Knowledge Engineering | **Final grade** 3.5/4.00 - Gold Medalist |

Thesis Bloom's Learning Outcomes' Automatic Classification Using LSTM and Pretrained Word Embeddings (<https://ieeexplore.ieee.org/abstract/document/9519690>)

ITCP, OOP, Data Structures, Enterprise Resource Planning, etc

Website <https://cuiwah.edu.pk/> | **Field of study** Computer Science | **Final grade** 3.57/4.00

● LANGUAGE SKILLS

Mother tongue(s): **SINDHI**

Other language(s): **ENGLISH, URDU, NORWEGIAN**

● DIGITAL SKILLS

Python | AWS | Apache Spark | Linux | Tableau | PowerBI | ShareLatex | Overleaf | AnyLogic | Keras | Tensorflow | PyTorch | NLP | Machine Learning | Deep Learning | Big Data | NLTK | ReactJS | Flask | Selenium | Streamlit | Multiple PHP (Laravel) Projects | Html, Java, CSS | Android, JAVA, React Native, Phonegap Cordova, JSON

ADDITIONAL INFORMATION

PUBLICATIONS

[Exploring the potential of large-language models \(LLMs\) for student feedback sentiment analysis](#) – 2023

[Assessing the usability of ChatGPT for formal english language learning](#) – 2023

[Data Driven Skill Assessment for Cybersecurity Exercises](#) – 2023

[Developing an Agent-Based Simulation Model for Predicting Technology Acceptance at Border Crossing Points](#) – 2023

[A Systematic Review on the Use of Emerging Technologies in Teaching English as an Applied Language at the University Level](#)
– 2023

[A Survey of Artificial Intelligence Techniques for User Perceptions' Extraction from Social Media Data](#) – 2022

[Towards Understanding of User Perceptions for Smart Border Control Technologies using a Fine-Tuned Transformer Approach](#)
– 2022

[Bloom's learning outcomes' automatic classification using lstm and pretrained word embeddings](#) – 2021

HONOURS AND AWARDS

10/02/2021

Fully funded Scholarship in PhD degree – Norwegian University of Science and Technology (NTNU), Norway Fully funded PhD scholarship.

26/03/2022

Gold Medal in Masters degree – Sukkur IBA University, Pakistan

02/02/2017

Prime Ministers Reimbursement Scholarship – Sukkur IBA University, Pakistan Fully funded scholarship in masters' degree.

10/09/2011

ICT R & D Fund Scholarship – COMSATS, Pakistan Fully funded scholarship in bachelors' degree.

GRANTS RECEIVED

15/02/2024 – CURRENT

VIPA-DELF (CHAMELEON)

Type: EU Sub-contract grant
Link: <https://shorturl.at/iAIN5>
Amount: 60000 EUR

15/12/2023 – CURRENT

EEA and NORWAY GRANTS 2014-2021 FUND FOR BILATERAL RELATIONS

Partner Institution: University of Hradec Kralove, Czech Republic
Amount: 333087 CZK

15/08/2023 – 30/09/2023

LITHME STSM Grant 2023

Topic: Differentiating the human, machine-generated reviews by LLM using the state-of-the-art NLP techniques
Host: Sukkur IBA University, Pakistan
Amount: 4000 EUR

01/11/2022 – 31/10/2023

EEA and NORWAY GRANTS 2014-2021 FUND FOR BILATERAL RELATIONS

Partner Institution: University of Hradec Kralove, Czech Republic
Amount: 206000 CZK

10/09/2022 – 25/10/2022

LITHME STSM Grant 2022

Topic: Aspect-Based Opinion Mining on Student's Feedback for Faculty Teaching Performance and Course Evaluation
Host: Sukkur IBA University, Pakistan
Amount: 1950 EUR

Link <https://lithme.eu/wp-content/uploads/2022/12/Scientific-report-Sarang-Shaikh.pdf>

15/11/2022 – 15/12/2022

Unifor Travel Exchange Grant

Amount: 22000 NOK

CONFERENCES AND SEMINARS

11/12/2023 – 12/12/2023 – Islamabad, Pakistan

Frontiers of Information Technology (FIT-2023)

- Title: Exploring the potential of large-language models (LLMs) for student feedback sentiment analysis
- Authors: Sarang Shaikh; Sher Muhammad Daudpota; Sule Yildirim Yayilgan; Sindhu Sindhu

Link <https://ieeexplore.ieee.org/xpl/conhome/10410269/proceeding>

26/10/2023 – 26/10/2023 – Brussels, Belgium

METICOS Final Event

- Session I: Walking through the METICOS Platform: Challenges & Results
- Session II – Panel I: METICOS Navigating the EU Border Control Landscape: Challenges, Opportunities, and Collaboration
- Session III – Panel II: Bridging Innovations & Business Realities: What comes next

Link <https://meticos-project.eu/meticos-final-event/>

10/02/2023 – 12/02/2023 – Abu Dhabi, UAE

2023 IEEE 9th International Conference on Automation, Robotics and Application (ICARA 2023)

- Title: Developing an agent-based simulation model for predicting technology acceptance at border crossing points
- Authors: Sarang Shaikh, Sule Yildirim Yayilgan
- **Received Best Paper Award**

Link <https://www.icara.us/2023.html>

12/09/2022 – 14/09/2022 – Darmstadt, Germany

EAB Research Projects Conference 2022

- This was organized by the European Association for Biometrics (EAB) with the contribution of EU-LISA through its Governance and Capabilities Unit, the support of DG HOME of the European Commission, at Fraunhofer IGD and Halmstad University, Germany.
- There were two presentations made by our team in the scope of METICOS project.

07/06/2022 – 11/06/2022 – Bergen, Norway

The International Artificial Intelligence in Bergen Research School

- This was a five-days research school hosted by University of Bergen (UiB).
- The school included technical lectures from experts, a workshop for physical attendees to discuss their research and a social program to promote networking.
- A poster presentation from one of the already published paper related to PhD research was also made in the research school.

Link <https://researchschool.w.uib.no/>

30/05/2022 – 03/06/2022 – Porto, Portugal

LITHME Training School 2022

- This was a fully funded training school under the umbrella of LITHME.
- I was selected as one of 43 participants who were selected for this out of 163 participants.
- The total funding received for this research visit was around 1100 euros.

Link <https://lithme.eu/training-school-2022/>

RECOMMENDATIONS

Prof. Dr. Sule Yildirim Yayilgan Main Supervisor

She is my PhD advisor

Email sule.yildirim@ntnu.no

Dr. Mohamed Abomhara Co-Supervisor

He is my PhD co-advisor

Email mohamed.abomhara@ntnu.no

Dr. Erjon Zoto Co-Supervisor

He is my PhD co-advisor

Email erjon.zoto@ntnu.no

Prof. Dr. Sher Muhammed Daudpotta Main Supervisor

He is my master's main advisor

Email sher@iba-suk.edu.pk

Dr. Ali Shariq Imran Mentor

I worked with him for couple of research publications and he is my mentor.

Email ali.imran@ntnu.no