

Dr. Muhammad Shumail Naveed

Personal Detail

Name:	Muhammad Shumail Naveed
Father's Name:	Muhammad Khurshid Zahid
Religion:	Islam
Nationality:	Pakistani
Marital Status:	Married
Date of Birth:	18 th September 1978
Mobile Number:	03337808276
Email:	dr.shumail.cs@um.uob.edu.pk / mshumailn@gmail.com

Qualification

Graduation (Computer Science)

Master's (Computer Science)

M.Phil (Computer Science)

PhD (Computer Science)

Current Position

Assistant Professor, Department of Computer Science & Information Technology,
University of Balochistan, Sariab Road Quetta, Balochistan, Pakistan

Area of Study/Research

Designing of Programming Languages

Desing & Modelling of Pedagogical Programming Languages

Quantitative Software Measurement

Theoretical Computer Science

Text Analysis

Publications

1. Samina Azeem, **Muhammad Shumail Naveed**, Muhammad Sajid, Imran Ali, AI vs. Human Programmers: Complexity and Performance in Code Generation, VAWKUM Transactions on Computer Sciences, Vol. 13, No. 1, pp: 201-216, 2025.
2. **Muhammad Shumail Naveed**, Pedagogical Suitability: A Software Metrics-Based Analysis of Java and Python, International Journal of Innovations in Science & Technology, Vol. 6, No, 4, pp 1956-1967, 2024.
3. **Muhammad Shumail Naveed**, Readability of Wikipedia pages on COVID-19, Universal Access in the Information Society, 2024.
4. **Muhammad Shumail Naveed**, Muhammad Sajid, Anwar Ali Sanjrani, & Shafaque Saira Malik, Sentiment Analysis of Diabetes Patients' Experiences Using Machine Learning Techniques, Journal of Computing & Biomedical Informatics, vol. 6, no. 2, pp: 172-181, 2024.
5. **Muhammad Shumail Naveed**, Quantifying Similarities: Oncology Documents from Google Bard and ChatGPT, International Journal of Innovations in Science & Technology, vol. 5, no. 4, pp. 773-786, 2023.
6. Rasheed Mohammed Al-Nofah, **Muhammad Shumail Naveed**, Unveiling Inefficiencies in Open-Source Code Using Multistage Analysis with Software Metrics, International Journal of Innovations in Science & Technology, vol. 5, no. 4, pp. 360-370, 2023.
7. **Muhammad Shumail Naveed**, Correlation Between GitHub Stars and Code Vulnerabilities, Journal of Computing & Biomedical Informatics, vol. 4, no. 01, pp. 141-151, 2022.
8. **Muhammad Shumail Naveed**, Readability of Wikipedia pages on andrology and gynecology: comparative study, Universal Access in the Information Society, vol. 21, no. 3, pp.1339-1351, 2023.
9. Kashif Munawar, **Muhammad Shumail Naveed**, The Impact of Language Syntax on the Complexity of Programs: A Case Study of Java and Python, International Journal of Innovations in Science and Technology, vol 4, no. 3, pp. 683-695, 2022.
10. Abdul Malik, **Muhammad Shumail Naveed**, Analysis of Code Vulnerabilities in Repositories of GitHub and RosettaCode: A Comparative Study, International Journal of Innovations in Science and Technology, vol 4, no. 2, pp. 499-511, 2022.
11. **Muhammad Shumail Naveed**, and Muhammad Sarim, Two-Phase CS0 for Introductory Programming, Proceedings of the Pakistan Academy of Sciences: Pakistan Academy of Sciences: A: Physical and Computational Sciences, vol. 59, no. 1, pp. 59-70, 2022.
12. Anwar Ali Sanjrani, Junaid Baber, Maheen Bakhtyar, Ihsan Ullah, **Muhammad Shumail Naveed**, Waheed Noor, Abdul Basit, Azam Khan, Naveed Sheikh, Extended framework for Sindhi numerals OCR using gradient orientation histograms, Journal of Intelligent & Fuzzy Systems, vol. 43, no. 2, pp. 2045-2056, 2022.

13. **Muhammad Shumail Naveed**, Measuring the Programming Complexity of C and C++ using Halstead Metrics, University of Sindh Journal of Information and Communication Technology, vol. 5, no. 4, pp. 158-165, 2021.
14. Dilawar Naseem, **Muhammad Shumail Naveed**, Hassan Ali, Samra Riaz, Induction of Chomsky Normal Form in Context-Free Grammar of LL(1) Parser: Some Initial Results, Journal of Information & Communication Technology, vol. 15, no. 1, pp. 30-39, 2021.
15. **Muhammad Shumail Naveed**, Comparison of C++ and Java in Implementing Introductory Programming Algorithms, QUEST RESEARCH JOURNAL, Vol. 19, No. 1, pages: 95–103, 2021.
16. Muhammad Shoaib, **Muhammad Shumail Naveed**, Anwar Ali Sanjrani, Atiq Ahmed, A Comparative Study of Contemporary Programming Languages in Implementation of Classical Algorithms, Journal of Information & Communication Technology, vol. 14, no. 1, pp. 23-31, 2021.
17. Shafaque Saira Malik, **Muhammad Shumail Naveed**, Pinial Khan Butt, Impact of Pair Programming on Novice Performance in Online First Programming Language (FPL) During Covid-19, European Scholar Journal, vol. 2, no. 4, pp. 1-9, 2021.
18. Hassan Ali, **Muhammad Shumail Naveed**, Dilawar Naseem, Jawaaid Shabbir, LL(1) Parser versus GNF induced LL(1) Parser on Arithmetic Expressions Grammar: A Comparative Study, Quest Research Journal, vol. 18, no. 2, pp. 89-101, 2020.
19. Shafaque Saira Malik, **Muhammad Shumail Naveed**, Furqan-ul-Haq Siddiqui, Attiq Ahmed, Ehsan Ullah, Programmer Assisted Tool Impact on Static Error Handling Capability of Novices in Imperative First Programming Languages, LC International Journal of STEM, vo1. 1, no 4, pp. 90-102, 2020.
20. **Muhammad Shumail Naveed**, Muhammad Sarim, Analyzing the Effects of Error Messages Presentation on Debugging and Programming, Sukkur IBA Journal of Computing and Mathematical Sciences, vol. 4, no. 2, pp. 38-48, 2020.
21. Shafaque Saira Malik, **Muhammad Shumail Naveed**, Furqan-ul-haq Siddiqui, Mohammed Umer. Implementation of CFG Based Natural Language Framework in Description of Syntax Errors in Imperative First Programming Languages: A Case Study from University of Baluchistan. LC International Journal of STEM, Vol. 1, No. 3, pp: 8-16, 2020.
22. Shafaque Saira Malik, **Muhammad Shumail Naveed**, Furqan-ul-haq Siddiqui. Creation of CFG based Natural Language Framework for Explication of Syntax Errors n First Programming Language Featuring Novices. LC International Journal of STEM, Vol. 1, No. 2, pp: 6-22, 2020.\
23. Anwar Ali Sanjrani, **Muhammad Shumail Naveed**, Muhammad Sajid, Atiq Ahmed, Shafiq Awan, Awais Khan Jumani. Multilingual OCR systems for the regional languages in

Balochistan. Indian Journal of Science and Technology, Volume 13, No. 21, page 2157-2167, 2020.

24. **Muhammad Shumail Naveed**, and Muhammad Sarim, Didactic Strategy for Learning Theory of Automata & Formal Languages, Proceedings of the Pakistan Academy of Sciences: Pakistan Academy of Sciences, A. Physical and Computational Sciences 55 (2): 55–67, 2018.
25. **Muhammad Shumail Naveed**, “Correlation between ABO Blood Groups and Proficiency in Computer Gaming”, Journal of Applied Environmental and Biological Sciences, Volume 8, No. 6, page: 67-73, 2018.
26. **Muhammad Shumail Naveed**, Muhammad Sarim, “Pedagogical Significance of Natural Language Programming in Introductory Programming”, Journal of Basic and Applied Sciences, Volume 14, page: 62-71, 2018.
27. **Muhammad Shumail Naveed**, Muhammad Sarim, Adnan Nadeem, “C in CS1: Snags and Viable Solution”, Mehran University Research Journal of Engineering & Technology, Volume 37, No. 1, page: 1-14, 2018.
28. **Muhammad Shumail Naveed**, “The Impact of Terminal Prefixing on LL(1) Parsing”, Journal of Applied Environmental and Biological Sciences, Volume 7, No. 5, page: 64-76, 2017.
29. **Muhammad Shumail Naveed**, Muhammad Sarim, Kamran Ahsan, "Learners Programming Language a Helping System for Introductory Programming Courses", Mehran University Research Journal of Engineering & Technology, Volume 35, No. 3, page: 347-358, 2016.
30. **Muhammad Shumail Naveed**, Muhammad Sarim, Kamran Ahsan. “On the Felicitous Applications of Natural Language”, Science International, Volume 27, No. 23, pp. 2643-2646, 2015.
31. **Muhammad Shumail Naveed**, Muhammad Sarim, Kamran Ahsan. "Compiler Engineering: The Fusion of Compiler Construction & Knowledge Management", International Conference on Information and Communication Technology Trends, pp. 215-221, 2013.