

**CHRIST**

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Notice for the PhD Viva Voce Examination

Mr Zahir Abbas Khan, Registration Number: 1982407, PhD Scholar at the School of Engineering and Technology, CHRIST (Deemed to be University), will defend his PhD thesis at the public viva-voce examination on Thursday, 27 August 2026, at 10.30 am in the CDI Conference Room, Block V, Bangalore Kengeri Campus, Bengaluru 560074, Karnataka, India

Title of the Thesis	:	Design and Development of a Machine Learning Framework for Fake News Detection Using Feature Extraction and User Profiling Techniques
Discipline	:	Computer Science and Engineering
External Examiner - I	:	Dr Indiramma M Professor and HOD Department of Artificial Intelligence and Data Science BMS College of Engineering Basavanagudi Bengaluru - 560004 Karnataka
External Examiner - II	:	Dr Namita Mittal Professor Department of Computer Science and Engineering Malaviya National Institute of Technology Jaipur Jaipur - 302017 Rajasthan
Supervisor	:	Dr Rekha V Associate Professor Department of AI and Data Science Engineering School of Engineering and Technology Bangalore Kengeri Campus CHRIST (Deemed to be University) Bengaluru - 560074 Karnataka

The members of the Research Advisory Committee of the Scholar, the faculty members of the Department and the School, interested experts, and research scholars of all the branches of research are cordially invited to attend this open viva voce examination.

Registrar (Academics)

Place: Bengaluru
Date: 19 August 2026

ABSTRACT

In this digital world, there is a real threat of the creation of false news, which is information that is intentionally made up or altered, known as fake news, which causes serious issues, including threats to public opinion, social harmony, and democratic processes. To address this, the research focuses on how to improve fake news detection. In this study, the textual data needs to be preprocessed to enhance classification performance. Common preprocessing methods, such as tokenization and stop-word removal, were used. This research proposes a user profiling model that integrates user profile characteristics and their analysis into a content-based method. The model includes user-level metadata such as credibility scores, behavioral patterns, and engagement metrics. In summary, this work offers a thorough framework that combines advanced user-centric analysis for Fake News Detection. The results suggest that integrating textual, contextual, stylistic, and behavioral information greatly enhances detection performance. The proposed framework can be expanded to identify misinformation on social media, blogs, and other online platforms. Future work may delve into transformer-based deep learning architectures, aiming to further improve performance and scalability.

Keywords: *Fake News Detection, Machine Learning, Natural Language Processing, SCETWW, TF-IDF, Word2Vec, User Profiling, User Profiling.*

Publications:

1. **Zahir Abbas Khan** and Rekha V, "Fake News Detection Using TF-IDF Weighted with Word2Vec: An Ensemble Approach," *International Journal of Intelligent Systems and Applications in Engineering*, vol. 11, no. 3, pp. 1065–1076, Jul. 2023.
2. **Zahir Abbas Khan** and Rekha V, "Enhancing Fake News Detection on Social Media through Advanced Machine Learning and User Profile Analysis," *Journal of Theoretical and Applied Information Technology*, 102(1), January 2024.
3. **Zahir Abbas Khan** and Rekha V, "Fake News Detection System: A Review of Different Model," in *Proc. International Conference on Information and Communication Engineering (ICICE-2021)*, 2021, pp. 68–72.
4. **Zahir Abbas Khan** and Rekha V, "Optimizing Fake News Classification Using Data Fusion and NLP-Based Machine Learning Techniques," in *Data Science and Security: Proceedings of the International Conference on Data Science, Computation and Security (IDSCS 2024)*, Springer Nature, 2025, pp. 315–326.