## Patent (2)

- 1. Vanlalmuansangi Khenglawt, **Sahinur Rahman Laskar**, Partha Pakray, and Ajoy Kumar Khan, "SYSTEM ZUR VORBEREITUNG UND UNTERSUCHUNG EINES ENGLISCH-MIZO- KORPUS DURCH AUFFINDEN VON TONALEN WÖRTERN" ("System for Preparing and Investigating an English-Mizo corpus by encountering Tonal Words")—German Utility Patent, 03 August 2022 (Status: Granted)
- 2. Partha Pakray, Riyanka Manna, Abdullah Faiz Ur Rahman Khilji, **Sahinur Rahman** Laskar, Dipankar Das and Sivaji Bandyopadhyay, "Ein System zur Beantwortung von Fragen und zur Empfehlung von Rezepten auf der Grundlage von Zutaten" ("A System on Answering Questions and Recommending Recipes based on Ingredients")— German Utility Patent, 09 September 2022 (Status: Granted)

# Journal (SCIE: 8, Scopus: 6)

- Ayushi Gupta, Pankaj Dadure, Sahinur Rahman Laskar, "A Review of Mathematical Information Retrieval: Bridging Symbolic Representation and Intelligent Retrieval", Archives of Computational Methods in Engineering Journal, IF - 12.1 (SCIE, Accepted in July, 2025)
- 2. **Sahinur Rahman Laskar**, Ritika Badhani, David Pinto, "A Review on Evaluation Metrics for Natural Language Processing Applications" Journal of Computación y Sistemas, (IF- 0.60), ISSN No.2007-9737 (Scopus, Accepted in July, 2025).
- 3. **Sahinur Rahman Laskar**, Gauri Gupta, Ritika Badhani, David Eduardo Pinto-Avendano, "Cyberbullying Detection in a Multi-classification Codemixed Dataset" Journal of Computación y Sistemas, Volume 28 No. 3, pp. 1091–1113 (2024) (IF- 0.60), ISSN No.2007-9737, DOI:10.13053/CyS-28-3-4989 Link: <a href="https://cys.cic.ipn.mx/ojs/index.php/CyS/article/view/4989/3733">https://cys.cic.ipn.mx/ojs/index.php/CyS/article/view/4989/3733</a>
- 4. Vanlalmuansangi Khenglawt, **Sahinur Rahman Laskar**, Partha Pakray, and Ajoy Kumar Khan, "Addressing Data Scarcity Issue for English--Mizo Neural Machine Translation Using Data Augmentation and Language Model", Journal of Intelligent and Fuzzy Systems (2023). (IF- 2) Link: <a href="https://doi.org/10.3233/JIFS-235740">https://doi.org/10.3233/JIFS-235740</a>
- Nabam Kakum, Sahinur Rahman Laskar, Koj Sambyo, Partha Pakray, "Neural machine translation for limited resources English-Nyishi pair", Journal of the Indian Academy of Sciences, SADHANA, vol. 48 (4), pp. 237 (2023) (IF- 1.2).
   Link: https://link.springer.com/article/10.1007/s12046-023-02308-8

6. Abdullah Faiz Ur Rahman Khilji, Utkarsh Sinha, Pintu Singh, Adnan Ali, Prachurya Nath, **Sahinur Rahman Laskar**, Partha Pakray, Pankaj Dadure, Riyanka Manna, Partha Pakray, Benoit Favre and Sivaji Bandyopadhyay, "Multimodal text summarization with evaluation approaches", Journal of the Indian Academy of Sciences, SADHANA, vol. 48 (4), pp. 256 (2023) (IF- 1.2).

Link: <a href="https://link.springer.com/article/10.1007/s12046-023-02284-z">https://link.springer.com/article/10.1007/s12046-023-02284-z</a>

7. **Sahinur Rahman Laskar**, Bishwaraj Paul, Pankaj Dadure, Partha Pakray, and Sivaji Bandyopadhyay, "English-Assamese Neural Machine Translation using Prior Alignment and Pre-trained Language Model", Journal of Computer Speech and Language, volume 82, pp. 101524 (2023) (IF- 3.252) **ISSN No. 0885-2308** 

Link: https://doi.org/10.1016/j.csl.2023.101524

- 8. **Sahinur Rahman Laskar**, Riyanka Manna, Partha Pakray, and Sivaji Bandyopadhyay, "A Domain Specific Parallel Corpus and Enhanced English-Assamese Neural Machine Translation", Journal of Computación y Sistemas, Volume 26 No. 4, pp. 1669–1687 (2022) (IF- 0.60), ISSN No.2007-9737 Link: https://doi.org/10.13053/CyS-26-4-4423
- 9. **Sahinur Rahman Laskar**, Abinash Gogoi, Samudranil Dutta, Prottay Kumar Adhikary, Prachurya Nath, Partha Pakray, and Sivaji Bandyopadhyay, "Investigation of Negation Effect for English–Assamese Machine Translation", Journal of the Indian Academy of Sciences, SADHANA, 47 (238), pp. 1-11 (2022) (IF- 1.2). ISSN NO: 0253-4142

Link: https://doi.org/10.1007/s12046-022-01965-5

- 10. Sahinur Rahman Laskar, Abdullah Faiz Ur Rahman Khilji, Partha Pakray, and Sivaji Bandyopadhyay, "Improved Neural Machine Translation for Low-Resource English--Assamese Pair", Journal of Intelligent and Fuzzy Systems, Volume 42 No. 5, pp. 4727-4738 (2022). (IF- 2) ISSN No. 1064-1246
  Link: <a href="https://doi.org/10.3233/JIFS-219260">https://doi.org/10.3233/JIFS-219260</a>
- 11. **Sahinur Rahman Laskar**, Bishwaraj Paul, Partha Pakray, and Sivaji Bandyopadhyay, "English-Assamese Multimodal Neural Machine Translation using Transliteration based Phrase Augmentation Approach", Journal of Procedia Computer Science, Volume 218, pp. 979-988 (2022) (IF- 0.883) ISSN NO: 0252-9742

  Link: <a href="https://doi.org/10.1016/j.procs.2023.01.078">https://doi.org/10.1016/j.procs.2023.01.078</a>
- 12. Vanlalmuansangi Khenglawt, **Sahinur Rahman Laskar**, Riyanka Manna, Partha Pakray, and Ajoy Kumar Khan, "Machine Translation for Low-Resource English-Mizo Pair Encountering Tonal Words", Journal of Computación y Sistemas Volume 26, Number 3,

pp. 1377–1398 (2022) (IF- 0.60) . Link: https://www.cys.cic.ipn.mx/ojs/index.php/CyS/article/viewFile/4358/3432

- 13. Abdullah Faiz Ur Rahman Khilji, Riyanka Manna, **Sahinur Rahman Laskar**, Partha Pakray, Dipankar Das and Sivaji Bandyopadhyay, "CookingQA: Answering Questions and Recommending Recipes based on Ingredients", Arabian Journal for Science and Engineering, Springer, Volume 46, Issue: 4, pp. 3701-3712 (2021) (IF:2.807). ISSN No. 2193-567X Link: <a href="https://link.springer.com/article/10.1007/s13369-020-05236-5">https://link.springer.com/article/10.1007/s13369-020-05236-5</a>
- 14. Abdullah Khilji, Riyanka Manna, **Sahinur Rahman Laskar**, Partha Pakray, Dipankar Das, Sivaji Bandyopadhyay, Alexander Gelbukh. "Question Classification and Answer Extraction for Developing a Cooking QA System", Computación y Sistemas Thematic Issue on Language & Knowledge Engineering (Guest editors: D. Pinto, B. Beltrán, A. Vázquez), Volume 24, No. 2 (2020). (IF-0.60)

Link: <a href="https://www.cys.cic.ipn.mx/ojs/index.php/CyS/article/view/3445">https://www.cys.cic.ipn.mx/ojs/index.php/CyS/article/view/3445</a>

# Conference/Workshop (31)

 Md Arid Hasan, Maram Hasanain, Fatema Ahmad, Sahinur Rahman Laskar, Sunaya Upadhyay, Vrunda N Sukhadia, Mucahid Kutlu, Shammur Absar Chowdhury, Firoj Alam, "Nativqa: Multilingual culturally-aligned natural query for llms" (Accepted in ACL-2025)

Link: https://arxiv.org/pdf/2407.09823

2. Kmainasi, M. B., Shahroor, A. E., Hasanain, M., **Laskar, Sahinur Rahman**, Hassan, N., & Alam, F. (2025). LlamaLens: Specialized multilingual LLM for analyzing news and social media content. In L. Chiruzzo, A. Ritter, & L. Wang (Eds.), Findings of the association for computational linguistics: Naacl 2025 (pp. 5627–5649). Albuquerque, New Mexico: Association for Computational Linguistics.

Link: <a href="https://aclanthology.org/2025.findings-naacl.313/">https://aclanthology.org/2025.findings-naacl.313/</a>

3. Santanu Pal, Partha Pakray, **Sahinur Rahman Laskar**, Lenin Laitonjam, Vanlalmuansangi Khenglawt, Sunita Warjri, Pankaj Kundan Dadure, Sandeep Kumar

Dash, Proceedings of the Eighth Conference on Machine Translation (WMT) Association for Computational Linguistics, pages 680–692.

Link: https://www2.statmt.org/wmt23/pdf/2023.wmt-1.56.pdf

4. Shayak Chakraborty, Darsh Kaushik, **Sahinur Rahman Laskar**, Partha Pakray and Sivaji Bandyopadhyay, "Exploring Text Summarization Models for Indian Languages", CEUR Workshop Proceedings, Forum for Information Retrieval Evaluation December 9-13, 2022, India [2022].

Link: <a href="https://ceur-ws.org/Vol-3395/T6-9.pdf">https://ceur-ws.org/Vol-3395/T6-9.pdf</a>

5. **Sahinur Rahman Laskar**, Rahul Singh, Abdullah Faiz Ur Rahman Khilji, Riyanka Manna, Partha Pakray and Sivaji Bandyopadhyay, "CNLP-NITS-PP at WANLP 2022 Shared Task: Propaganda Detection in Arabic using Data Augmentation and AraBERT Pre-trained Model", Proceedings of the The Seventh Arabic Natural Language Processing Workshop (WANLP), pages 541 – 544 December 8, 2022 [2022].

Link: https://aclanthology.org/2022.wanlp-1.65.pdf

6. **Sahinur Rahman Laskar**, Rahul Singh, Shyambabu Pandey, Riyanka Manna, Partha Pakray, Sivaji Bandyopadhyay, "CNLP-NITS-PP at MixMT 2022: Hinglish–English Code-Mixed Machine Translation", Proceedings of the Seventh Conference on Machine Translation (WMT), pages 1158–1161 Abu Dhabi, December 7–8, 2022. Association for Computational Linguistic. [2022]

Link: https://www.statmt.org/wmt22/pdf/2022.wmt-1.116.pdf

 Vanlalmuansangi Khenglawt, Sahinur Rahman Laskar, Riyanka Manna, Partha Pakray and Ajoy Kumar Khan "Mizo Visual Genome 1.0: A Dataset for English-Mizo Multimodal Neural Machine Translation", Track 5: Artificial Intelligence, Data Science & Computing, IEEE SILCON 2022, 4-6 November 2022, National Institute of Technology Silchar. [2022]

Link: https://ieeexplore.ieee.org/document/10028882

8. Vanlalmuansangi Khenglawt, **Sahinur Rahman Laskar**, Riyanka Manna, Partha Pakray and Ajoy Kumar Khan, "Recent Trends on Low-Resource Neural Machine Translation and Research Scope for English-Mizo Pair", International Conference on Intelligent Computing Systems and Applications National Institute of Technology Silchar Conference Date: September 23-24, 2022. (Accepted) [2022]

9. **Sahinur Rahman Laskar**, Pankaj Dadure, Riyanka Manna, Partha Pakray and Sivaji Bandyopadhyay, "English to Bengali Multimodal Neural Machine Translation using Transliteration-based Phrase Pairs Augmentation", The 9th Workshop on Asian Translation WAT 2022. [2022]

Link: <a href="https://aclanthology.org/2022.wat-1.14.pdf">https://aclanthology.org/2022.wat-1.14.pdf</a>

10. **Sahinur Rahman Laskar**, Riyanka Manna, Partha Pakray and Sivaji Bandyopadhyay, "Investigation of Multilingual Neural Machine Translation for Indian Languages", The 9th Workshop on Asian Translation WAT 2022. [2022]

Link: https://aclanthology.org/2022.wat-1.9.pdf

11. **Sahinur Rahman Laskar**, Rahul Singh, Md Faizal Karim, Riyanka Manna, Partha Pakray and Sivaji Bandyopadhyay, "Investigation of English to Hindi Multimodal Neural Machine Translation using Transliteration-based Phrase Pairs Augmentation", The 9th Workshop on Asian Translation WAT 2022. [2022]

Link: https://aclanthology.org/2022.wat-1.15.pdf

12. **Sahinur Rahman Laskar**, Bishwaraj Paul, Partha Pakray and Sivaji Bandyopadhyay, "Improving English-Assamese Neural Machine Translation using Transliteration-based Approach", Proceedings of the International Conference on Frontiers of Intelligent Computing: Theory and Applications, FICTA 2022 [2022]

Link: https://doi.org/10.1007/978-981-19-7513-4\_20

13. Vanlalmuansangi Khenglawt, **Sahinur Rahman Laskar**, Santanu Pal, Partha Pakray and Ajoy Kumar Khan, "Language Resource Building and English-to-Mizo Neural Machine Translation Encountering Tonal Words", 6th Workshop on Indian Language Data: Resources and Evaluation (WILDRE), LREC 2022 [2022]

Link: <a href="https://aclanthology.org/2022.wildre-1.9.pdf">https://aclanthology.org/2022.wildre-1.9.pdf</a>

14. Prottay Kumar Adhikary, Riyanka Manna, **Sahinur Rahman Laskar**, Partha Pakray, "Ontology-Based Healthcare Hierarchy Towards Chatbot", International Conference on Computational Intelligence in Communications and Business Analytics (CICBA 2022), CCIS Springer [2022].

Link: https://link.springer.com/chapter/10.1007/978-3-031-10766-5 26

15. **Sahinur Rahman Laskar**, Bishwaraj Paul, Siddharth Paudwal, Pranjit Gautam, Nirmita Biswas and Partha Pakray, "Multimodal Neural Machine Translation for

English-Assamese Pair", 2021 International Conference on Computational Performance Evaluation (ComPE) [2021]

Link: https://doi.org/10.1109/ComPE53109.2021.9752181

16. **Sahinur Rahman Laskar**, Abdullah Faiz Ur Rahman Khilji, Darsh Kaushik, Partha Pakray, Sivaji Bandyopadhyay, "Improved English to Hindi Multimodal Neural Machine Translation", In the Proceedings of the 8th Workshop on Asian Translation, pages 155–160 Bangkok, Thailand, August 5-6, 2021. [2021]

Link: <a href="https://aclanthology.org/2021.wat-1.17.pdf">https://aclanthology.org/2021.wat-1.17.pdf</a>

17. **Sahinur Rahman Laskar**, Abdullah Faiz Ur Rahman Khilji, Darsh Kaushik, Partha Pakray and Sivaji Bandyopadhyay, "English-Khasi Corpus: EnKhCorp1.0", Proceedings of the 18th Biennial Machine Translation Summit, Virtual USA, August 16 - 20, 2021, 4th Workshop on Technologies for MT of Low Resource Languages, Pp 89-93. [2021]

Link: <a href="https://aclanthology.org/2021.mtsummit-loresmt.9">https://aclanthology.org/2021.mtsummit-loresmt.9</a>

18. **Sahinur Rahman Laskar**, Abdullah Faiz Ur Rahman Khilji, Partha Pakray and Sivaji Bandyopadhyay, "EnAsCorp1.0: English-Assamese Corpus", Proceedings of the 3rd Workshop on Technologies for MT of Low Resource Languages, pp. 62–68 December 04, 2020. Association for Computational Linguistics. [2020].

Link: <a href="https://aclanthology.org/2020.loresmt-1.9">https://aclanthology.org/2020.loresmt-1.9</a>

19. Abdullah Faiz Ur Rahman Khilji , **Sahinur Rahman Laskar**, Partha Pakray and Sivaji Bandyopadhyay, "Urdu Fake News Detection using Generalized Autoregressors", CEUR Workshop Proceedings, Forum for Information Retrieval Evaluation 2020, December 16-20, 2020, Hyderabad, India [2020].

Link: http://ceur-ws.org/Vol-2826/T3-3.pdf

20. **Sahinur Rahman Laskar**, Abdullah Faiz Ur Rahman Khilji, Partha Pakray and Sivaji Bandyopadhyay, "Multimodal Neural Machine Translation for English to Hindi", Shared Task – 7th Workshop on Asian Translation (WAT 2020), pp. 109–113, Hosted by the AACL-IJCNLP 2020 [2020].

Link: <a href="https://www.aclweb.org/anthology/2020.wat-1.11/">https://www.aclweb.org/anthology/2020.wat-1.11/</a>

21. **Sahinur Rahman Laskar**, Abdullah Faiz Ur Rahman Khilji, Partha Pakray and Sivaji Bandyopadhyay, "Zero-Shot Neural Machine Translation: Russian-Hindi", Proceedings of the 3rd Workshop on Technologies for MT of Low Resource Languages, pp. 38–42, December 04, 2020, Association for Computational Linguistics [2020].

Link: <a href="https://aclanthology.org/2020.loresmt-1.5">https://aclanthology.org/2020.loresmt-1.5</a>

22. **Sahinur Rahman Laskar**, Abdullah Faiz Ur Rahman Khilji, Partha Pakray, Sivaji Bandyopadhyay, "Hindi-Marathi Cross Lingual Model", Proceedings of the 5th Conference on Machine Translation (WMT), pp. 394–399 Online, November 19–20, 2020, Association for Computational Linguistics. [2020].

Link: https://www.aclweb.org/anthology/2020.wmt-1.45.pdf

23. Abdullah Faiz Ur Rahman Khilji, **Sahinur Rahman Laskar**, Partha Pakray, Rabiah Abdul Kadir, Maya Silvi Lydia, Sivaji Bandyopadhyay, "HealFavor: Dataset and A Prototype System for Healthcare ChatBot", In International Conference on Data Science, Artificial Intelligence, and Business Analytics (DATABIA), Medan, Indonesia, 2020, pp. 1-4, doi: 10.1109/DATABIA50434.2020.9190281. [2020]

Link: <a href="https://ieeexplore.ieee.org/document/9190281">https://ieeexplore.ieee.org/document/9190281</a>

24. **Sahinur Rahman Laskar**, Partha Pakray and Sivaji Bandyopadhyay, "Neural Machine Translation: Assamese-Bengali", Modeling, Simulation and Optimization: Proceedings of CoMSO 2020 [2020].

Link: https://doi.org/10.1007/978-981-15-9829-6 45

25. **Sahinur Rahman Laskar**, Partha Pakray and Sivaji Bandyopadhyay, "Neural Machine Translation for Low Resource Assamese-English", Proceedings of the International Conference on Computing and Communication Systems: I3CS 2020, NEHU, Shillong, India [2020]

Link: https://doi.org/10.1007/978-981-33-4084-8 4

26. **Sahinur Rahman Laskar**, Bishwaraj Paul, Prottay Kumar Adhikary, Partha Pakray and Sivaji Bandyopadhyay, "Neural Machine Translation for Tamil–Telugu Pair" Proceedings of the Sixth Conference on Machine Translation (WMT), EMNLP [2021]

Link: https://aclanthology.org/2021.wmt-1.29

27. **Sahinur Rahman Laskar**, Rohit Pratap Singh, Partha Pakray, Sivaji Bandyopadhyay, "English to Hindi Multi-modal Neural Machine Translation and Hindi Image Captioning", Proceedings of the 6th Workshop on Asian Translation 2019, doi 10.18653/v1/D19-5205, Association for Computational Linguistics, pp. 62-67 [2019].

Link: https://doi.org/10.18653/v1/D19-5205

28. **Sahinur Rahman Laskar**, Abinash Dutta, Partha Pakray and Sivaji Bandyopadhyay, "Neural Machine Translation: English to Hindi", in the Proceedings of 3rd IEEE Conference on Information & Communication Technology, IIIT Allahabad, Dec 06-09, 2019, DOI: 10.1109/CICT48419.2019.9066238, pp. 1-6 [2019].

Link: https://doi.org/10.1109/CICT48419.2019.9066238

29. Sahinur Rahman Laskar, Partha Pakray and Sivaji Bandyopadhyay "Neural Machine Translation: Hindi-Nepali", in the Proceedings of the Fourth Conference on Machine Translation (WMT), Volume 2: Shared Task Papers, pp. 900–905, Florence, Italy, August 1-2, 2019. (2019)

Link: https://www.aclweb.org/anthology/W19-5427/

30. Rupam Bhagawati, **Sahinur Rahman Laska**r, Bhagaban Swain, "Documents clustering using quantum clustering algorithm" 2016 International Conference on Microelectronics, Computing and Communications (MicroCom), IEEE [2016]

Link: https://doi.org/10.1109/MicroCom.2016.7522562

31. **Sahinur Rahman Laska**r, Bhagaban Swain, "Analyzing Quantum Probability Ranking Principle with the concept of Hyperspace Analogue to Language (HAL)" 2015 International Symposium on Advanced Computing and Communication (ISACC) [2015]

Link: <a href="https://doi.org/10.1109/ISACC.2015.7377353">https://doi.org/10.1109/ISACC.2015.7377353</a>

## **Book Chapters (2)**

1. **Sahinur Rahman Laskar**, Abdullah Faiz Ur Rahman Khilji, Partha Pakray, Rabiah Abdul Kadir, Maya Silvi Lydia, Sivaji Bandyopadhyay, "HealFavor: Machine Translation Enabled Healthcare Chat Based Application", Natural Language Processing in Healthcare: A Special Focus on Low Resource Language, CRC Press [2022]

Link: https://doi.org/10.1201/9781003138013-6

2. Abdullah Faiz Ur Rahman Khilji, **Sahinur Rahman Laskar**, Partha Pakray, Rabiah Abdul Kadir, Maya Silvi Lydia, Sivaji Bandyopadhyay, "Healfavor: A Chatbot Application in Healthcare" Analysis of Medical Modalities for Improved Diagnosis in Modern Healthcare, CRC Press [2021]

Link: https://doi.org/10.1201/9781003146810-3