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Education

- 2019 – 2023  **Ph.D., CSE** National Institute of Technology, Silchar, India
Field of Study: Machine Translation, *Natural Language Processing*.
- 2013 – 2015  **M.Tech., IT (7.76)** Assam University Silchar, India
Field of Study: Information Retrieval, *Natural Language Processing*.
- 2007 – 2011  **B.E., CSE (65.32%)** Assam Engineering College, Guwahati, India

Research Interest

Machine Translation, Natural Language Processing, Deep Learning, Machine Learning.

Programming Skills

Python, Java, C, C++, HTML, JavaScript, PHP, MySQL.

Work Experience and Responsibility

- Working as an Assistant Professor at SoCS, University of Petroleum and Energy Studies (UPES) (NIRF#52), Dehradun since 09/02/2023 to present.
- Organizer of Shared Task: Low-Resource Indic Language Translation, EMNLP 2023 EIGHTH CONFERENCE ON MACHINE TRANSLATION (WMT23), Link: <http://www2.statmt.org/wmt23/indic-mt-task.html>
- Worked as a Guest Faculty/Lecturer on contractual position (3 years 4 months) at Assam University (CSE Department), Silchar, India, and M.H.C.M Science College, Algapur (CS Department), Silchar, India
- Worked as a Junior Research Fellow (JRF) at Assam University, Silchar, India from 03/08/2015 to 31/01/2016.
- Guest speaker for demonstration of Deep Learning for Machine Translation on 29/06/2021 at Faculty development Program on Deep Learning for Natural Language Processing (DL-NLP 2021), Department of CSE and IT, Jaypee Institute of Information Technology, Noida, India.
- Worked as a student volunteer in a conference on "International Conference on Big Data, Machine Learning and Applications (BigDML 2019)" held from 16/12/2019 to 19/12/2019.
- Worked as a student volunteer in a workshop on "Deep Learning Techniques and Tools: An Academic and Industrial Approach" held from 08/04/2019 to 12/04/2019.

Mentorship Experience

- MTech. (Major Project) guided, Title: "Detecting Cyberbullying in Codemixed Dataset" (Ms.Gauri Gupta, MTech CSE) (Accepted in Scopus Indexed Journal) (2024)
- BTech. Internship project guided, Title: "MiglaniHomeEssentials: E-Commerce Website" (Deepanshu Miglani, BTech CSE(AIML)) Link: <https://github.com/deepanshum0408/Flask-E-commerce-website> (2024)

Research Participation and Achievement

- Participated in Shared Task: Propaganda Detection in Arabic at WANLP, EMNLP-2022, Our team name: CNLP-NITS-PP and achieved 3rd rank position in subtask-1. Result Link: <https://sites.google.com/view/propaganda-detection-in-arabic/results?authuser=0>
- Participated in Shared Task: Code-mixed Machine Translation (MixMT), EMNLP 2022 Sixth Conference on Machine Translation (WMT22). Our Team: CNLP-NITS-PP.
- Participated in Shared Task: WAT2022 The 9th Workshop on Asian Translation - “Indic-task: MultiIndicMT”. Our Team name: CNLP-NITS-PP.
- Participated in Shared Task: WAT2022 The 9th Workshop on Asian Translation - “Multi-Modal Translation Task for English to Bengali”. Achieved best results. Our Team name: CNLP-NITS-PP. Link: <http://lotus.kuee.kyoto-u.ac.jp/WAT/evaluation/list.php?t=235&o=7>.
- Participated in Shared Task: WAT2022 The 9th Workshop on Asian Translation - “Multi-Modal Translation Task for English to Hindi”. Achieved Second best results. Our Team name: CNLP-NITS-PP. Link: <http://lotus.kuee.kyoto-u.ac.jp/WAT/evaluation/list.php?t=96&o=7>
- Achieved best paper award presenter at 10th International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2022) June 18-19, 2022. Paper Title: "Improving English-Assamese Neural Machine Translation using Transliteration-based Approach" Link: https://ficta.org/assets/doc/FICTA-2022_List%20of%20Best%20Paper%20Awards.pdf
- Participated in Shared Task: Similar Language Translation, EMNLP 2021 Sixth Conference on Machine Translation (WMT21). Our Team: CNLP-NITS, achieved 4th rank for Tamil to Telugu and 6th rank for Telugu to Tamil.
- Participated in Shared Task: WAT2021 The 8th Workshop on Asian Translation - “Multi-Modal Translation Task for English to Hindi”. Our Team name: CNLP-NITS-PP.
- Participated in NLP HACK 2021 organized by CIE IIIT Hyderabad, India, April 2-3, 2021. Team Name: CNLP- NITS-PP.
- Participated in Shared Task: Fake News Detection in the Urdu Language (UrduFake) – FIRE 2020. Our Team name: CNLP-NITS and achieved 2nd rank.
- Participated in Shared Task: Similar Language Translation, EMNLP 2020 Fifth Conference on Machine Translation (WMT2020). Our Team: NITS-CNLP, achieved 10th rank for Hindi to Marathi and 15th rank for Marathi to Hindi.
- Participated in Shared Task: WAT2020, The 7th Workshop on Asian Translation - “Multi-Modal Translation Task for English to Hindi”. Our Team name: CNLP-NITS.
- Participated in Shared Task: 3rd Workshop on Technologies for MT of Low Resource Languages (LoResMT 2020) on zero-shot NMT: Russian-Hindi.
- Participated in Shared Task: Similar Language Translation, ACL 2019: Fourth Conference On Machine Translation (WMT2019), August 1-2, 2019 Florence, Italy – Our Team: NITS-CNLP, achieved the best result for Nepali-Hindi language pair, achieved first rank for both Hindi-to-Nepali and Nepali-to-Hindi translation.
- Participated in Shared Task: WAT2019 The 6th Workshop on Asian Translation – “Multi-Modal Translation Task”, Evaluation Week: Aug 03-10, 2019, and November 3-4, 2019: WAT2019 takes place. Our Team name: 683, achieved first rank.

Research Publications

Patent (2)

- 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)
- 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 Articles (11) (7 SCIE, 4 SCOPUS)

- 1 Kakum, N., **Laskar, Sahinur Rahman**, Sambyo, K., & Pakray, P. (2023). Neural machine translation for limited resources english-nyishi pair. *Indian Academy of Sciences (Sadhana) (SCIE) (Impact Factor: 1.2)*. doi:https://doi.org/10.1007/s12046-023-02308-8
- 2 Khenglawt, V., **Laskar, Sahinur Rahman**, Pakray, P., & Khan, A. K. (2023). Addressing data scarcity issue for english–mizo neural machine translation using data augmentation and language model. *Journal of Intelligent and Fuzzy Systems (SCIE) (Impact Factor: 2)*. doi:https://doi.org/10.3233/JIFS-235740
- 3 Khilji, A. F. U. R., Sinha, U., Singh, P., Ali, A., **Laskar, Sahinur Rahman**, Dadure, P., ... Bandyopadhyay, S. (2023). Multimodal text summarization with evaluation approaches. *Indian Academy of Sciences (Sadhana) (SCIE) (Impact Factor: 1.2)*. doi:https://doi.org/10.1007/s12046-023-02284-z
- 4 **Laskar, Sahinur Rahman**, Paul, B., Dadure, P., Manna, R., Pakray, P., & Bandyopadhyay, S. (2023). English-assamese neural machine translation using prior alignment and pre-trained language model. *Computer Speech Language Journal (SCIE) (Impact Factor: 3.252)*. doi:https://doi.org/10.1016/j.csl.2023.101524
- 5 **Laskar, Sahinur Rahman**, Paul, B., Pakray, P., & Bandyopadhyay, S. (2023). English-assamese multimodal neural machine translation using transliteration-based phrase augmentation approach. *Procedia Computer Science Journal (SCOPUS) (Impact Factor: 0.883)*, 218, 979–988. doi:https://doi.org/10.1016/j.procs.2023.01.078
- 6 Khenglawt, V., **Laskar, Sahinur Rahman**, Pakray, P., & Khan, A. K. (2022). Machine translation for low-resource english–mizo pair encountering tonal words. *Computación y Sistemas (SCOPUS) (Impact Factor: 0.60)*, 26(3). Retrieved from https://www.cys.cic.ipn.mx/ojs/index.php/CyS/article/viewFile/4358/3432
- 7 **Laskar, Sahinur Rahman**, Khilji, A. F. U. R., Pakray, P., & Bandyopadhyay, S. (2022). Improved neural machine translation for low-resource english-assamese pair. *Journal of Intelligent Fuzzy Systems (SCIE) (Impact Factor: 2)*, 42, 4727–4738. doi:https://doi.org/10.3233/JIFS-219260

- 8 **Laskar, Sahinur Rahman**, Manna, R., Pakray, P., & Bandyopadhyay, S. (2022a). A domain specific parallel corpus and enhanced english- assamese neural machine translation. *Computación y Sistemas (SCOPUS) (Impact Factor: 0.60)*, 26(4). Retrieved from <https://www.cys.cic.ipn.mx/ojs/index.php/CyS/article/view/4423/3457>
- 9 **Laskar, Sahinur Rahman**, Pakray, P., & Bandyopadhyay, S. (2022). Investigation of negation effect for english-assamese machine translation. *Indian Academy of Sciences (Sadhana) (SCIE) (Impact Factor: 1.2)*, 47(4), 1–11. [doi:https://doi.org/10.1007/s12046-022-01965-5](https://doi.org/10.1007/s12046-022-01965-5)
- 10 Khilji, A. F. U. R., Manna, R., **Laskar, Sahinur Rahman**, Pakray, P., Das, D., Bandyopadhyay, S., & Gelbukh, A. (2021). CookingQA: Answering questions and recommending recipes based on ingredients. *Arabian Journal for Science and Engineering (SCIE) (Impact Factor: 2.807)*, 46(4), 3701–3712. [doi:https://doi.org/10.1007/s13369-020-05236-5](https://doi.org/10.1007/s13369-020-05236-5)
- 11 Rahman Khilji, A. F. U., Manna, R., **Laskar, Sahinur Rahman**, Pakray, P., Das, D., Bandyopadhyay, S., & Gelbukh, A. (2020). Question classification and answer extraction for developing a cooking qa system. *Computación y Sistemas (SCOPUS) (Impact Factor: 0.60)*, 24(2), 927–933. [doi:https://doi.org/10.13053/cys-24-2-3445](https://doi.org/10.13053/cys-24-2-3445)

Conference / Workshop Proceedings (29)

- 1 Pal, S., Pakray, P., **Laskar, Sahinur Rahman**, Dash, S. K., Laitonjam, L., Khenglawt, V., ... Dadure, P. K. (2023). Findings of the wmt 2023 shared task on low-resource indic language translation. In *Proceedings of the eighth conference on machine translation*. Association for Computational Linguistics, Singapore. Retrieved from <https://www2.statmt.org/wmt23/pdf/2023.wmt-1.56.pdf>
- 2 Chakraborty, S., Kaushik, D., **Laskar, Sahinur Rahman**, Pakray, P., & Bandyopadhyay, S. (2022). Exploring text summarization models for indian languages. In *Forum for information retrieval evaluation, ceur workshop proceedings* (pp. 1–6). India. Retrieved from <https://ceur-ws.org/Vol-3395/T6-9.pdf>
- 3 Adhikary, P. K., Manna, R., **Laskar, Sahinur Rahman**, & Pakray, P. (2022). Ontology-based healthcare hierarchy towards chatbot. In *Computational intelligence in communications and business analytics, crc press* (pp. 326–335). [doi:https://doi.org/10.1007/978-3-031-10766-5_26](https://doi.org/10.1007/978-3-031-10766-5_26)
- 4 Khenglawt, V., **Laskar, Sahinur Rahman**, Manna, R., Pakray, P., & Kumar Khan, A. (2022a). Mizo visual genome 1.0: A dataset for english-mizo multimodal neural machine translation. In *Artificial intelligence, data science computing, iee silcon 2022*. [doi:10.1109/SILCON55242.2022.10028882](https://doi.org/10.1109/SILCON55242.2022.10028882)
- 5 Khenglawt, V., **Laskar, Sahinur Rahman**, Manna, R., Pakray, P., & Kumar Khan, A. (2022b). Recent trends on low-resource neural machine translation and research scope for english-mizo pair. In *International conference on intelligent computing systems and applications, springer, 2022*. (Accepted) (In press).
- 6 Khenglawt, V., **Laskar, Sahinur Rahman**, Pal, S., Pakray, P., & Khan, A. K. (2022). Language resource building and english-to-mizo neural machine translation encountering tonal words. In *Proceedings of the wildre-6 workshop @lrec2020, marseille, european language resources association (elra)* (pp. 48–54). Retrieved from <http://www.lrec-conf.org/proceedings/lrec2022/workshops/WILDRE6/pdf/2022.wildre6-1.9.pdf>
- 7 **Laskar, Sahinur Rahman**, Dadure, P., Manna, R., Pakray, P., & Bandyopadhyay, S. (2022). English to bengali multimodal neural machine translation using transliteration-based phrase pairs augmentation. In *9th workshop on asian translation wat2022, colling*. Retrieved from <https://aclanthology.org/2022.wat-1.14.pdf>
- 8 **Laskar, Sahinur Rahman**, Manna, R., Pakray, P., & Bandyopadhyay, S. (2022b). Investigation of multilingual neural machine translation for indian languages. In *9th workshop on asian translation wat2022, colling*. ACL. Retrieved from <https://aclanthology.org/2022.wat-1.9.pdf>

- 9 **Laskar, Sahinur Rahman**, Paul, B., Pakray, P., & Bandyopadhyay, S. (2022). Improving english-assamese neural machine translation using transliteration-based approach. In *Proceedings of the international conference on frontiers of intelligent computing: Theory and applications, ficta 2022*.
[doi:https://doi.org/10.1007/978-981-19-7513-4_20](https://doi.org/10.1007/978-981-19-7513-4_20)
- 10 **Laskar, Sahinur Rahman**, Singh, R., Karim, M. F., Manna, R., Pakray, P., & Bandyopadhyay, S. (2022). Investigation of english to hindi multimodal neural machine translation using transliteration-based phrase pairs augmentation. In *9th workshop on asian translation wat2022, colling*. Retrieved from
<https://aclanthology.org/2022.wat-1.15.pdf>
- 11 **Laskar, Sahinur Rahman**, Singh, R., Manna, R., Khilji, A. F. U. R., Pakray, P., & Bandyopadhyay, S. (2022). Cnlp-nits-pp at wanlp 2022 shared task: Propaganda detection in arabic using data augmentation and arabert pre-trained model. In *Emnlp 2022 propaganda detection in arabic shared task, wanlp-22*. ACL. Retrieved from <https://aclanthology.org/2022.wanlp-1.65.pdf>
- 12 **Laskar, Sahinur Rahman**, Singh, R., Manna, R., Pakray, P., & Bandyopadhyay, S. (2022). Cnlp-nits-pp at mixmt 2022: Hinglish-english code-mixed machine translation. In *Emnlp 2022 seventh conference on machine translation (wmt22)*. ACL. Retrieved from
<https://www.statmt.org/wmt22/pdf/2022.wmt-1.116.pdf>
- 13 **Laskar, Sahinur Rahman**, Darsh, A. F. U. R. K., Pakray, P., Bandyopadhyay, S. et al. (2021). Enkhcorp1.o: An english-khasi corpus. In *Proceedings of the 4th workshop on technologies for mt of low resource languages (loresmt2021), mtsummit* (pp. 89–95). Retrieved from
<https://aclanthology.org/2021.mtsummit-loresmt.9>
- 14 **Laskar, Sahinur Rahman**, Khilji, A. F. U. R., Kaushik, D., Pakray, P., & Bandyopadhyay, S. (2021). Improved english to hindi multimodal neural machine translation. In *Proceedings of the 8th workshop on asian translation (wat2021), ijcnlp* (pp. 155–160). ACL.
[doi:https://doi.org/10.18653/v1/2021.wat-1.17](https://doi.org/10.18653/v1/2021.wat-1.17)
- 15 **Laskar, Sahinur Rahman**, Pakray, P., & Bandyopadhyay, S. (2021a). Neural machine translation for low resource assamese–english. In *Proceedings of the international conference on computing and communication systems: I3cs 2020, nehu, shillong, india* (Vol. 170, p. 35). Springer.
[doi:https://doi.org/10.1007/978-981-33-4084-8_4](https://doi.org/10.1007/978-981-33-4084-8_4)
- 16 **Laskar, Sahinur Rahman**, Pakray, P., & Bandyopadhyay, S. (2021b). Neural machine translation: Assamese–bengali. In *Modeling, simulation and optimization: Proceedings of comso 2020* (pp. 571–579). Springer. [doi:https://doi.org/10.1007/978-981-15-9829-6_45](https://doi.org/10.1007/978-981-15-9829-6_45)
- 17 **Laskar, Sahinur Rahman**, Paul, B., Adhikary, P. K., Pakray, P., & Bandyopadhyay, S. (2021). Neural machine translation for tamil–telugu pair. In *Proceedings of the sixth conference on machine translation (wmt), emnlp* (pp. 289–292). ACL. Retrieved from <https://aclanthology.org/2021.wmt-1.29>
- 18 **Laskar, Sahinur Rahman**, Paul, B., Paudwal, S., Gautam, P., Biswas, N., & Pakray, P. (2021). Multimodal neural machine translation for english-assamese pair. In *2021 international conference on computational performance evaluation (compe)* (pp. 387–392). IEEE.
[doi:https://doi.org/10.1109/ComPE53109.2021.9752181](https://doi.org/10.1109/ComPE53109.2021.9752181)
- 19 **Laskar, Sahinur Rahman**, Khilji, A. F. U. R., Pakray, P., & Bandyopadhyay, S. (2020a). EnAsCorp1.o: English-Assamese corpus. In *Proceedings of the 3rd workshop on technologies for mt of low resource languages, aacl* (pp. 62–68). ACL. Suzhou, China. Retrieved from
<https://aclanthology.org/2020.loresmt-1.9>
- 20 **Laskar, Sahinur Rahman**, Khilji, A. F. U. R., Pakray, P., & Bandyopadhyay, S. (2020b). Multimodal neural machine translation for English to Hindi. In *Proceedings of the 7th workshop on asian translation, aacl* (pp. 109–113). ACL. Suzhou, China. Retrieved from <https://aclanthology.org/2020.wat-1.11>
- 21 Khilji, A. F. U. R., **Laskar, Sahinur Rahman**, Pakray, P., & Bandyopadhyay, S. (2020). Urdu fake news detection using generalized autoregressors. In *Ceur workshop proceedings, forum for information*

retrieval evaluation 2020, december 16-20, 2020, hyderabad, India. CEUR-WS. Retrieved from

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

- 22 Khilji, A. F. U. R., **Laskar, Sahinur Rahman**, Pakray, P., Kadir, R. A., Lydia, M. S., & Bandyopadhyay, S. (2020). Healfavor: Dataset and a prototype system for healthcare chatbot. In *2020 international conference on data science, artificial intelligence, and business analytics (databia)* (pp. 1–4). IEEE.
[doi:https://doi.org/10.1109/DATABIA50434.2020.9190281](https://doi.org/10.1109/DATABIA50434.2020.9190281)
- 23 **Laskar, Sahinur Rahman**, Khilji, A. F. U. R., Pakray, P., & Bandyopadhyay, S. (2020c). Hindi-marathi cross lingual model. In *Proceedings of the fifth conference on machine translation* (pp. 396–401). ACL. Retrieved from <https://aclanthology.org/2020.wmt-1.45>
- 24 **Laskar, Sahinur Rahman**, Khilji, A. F. U. R., Pakray, P., & Bandyopadhyay, S. (2020d). Zero-shot neural machine translation: Russian-hindi@ loresmt 2020. In *Proceedings of the 3rd workshop on technologies for mt of low resource languages, aacl* (pp. 38–42). ACL. Retrieved from <https://aclanthology.org/2020.loresmt-1.5>
- 25 **Laskar, Sahinur Rahman**, Dutta, A., Pakray, P., & Bandyopadhyay, S. (2019). Neural machine translation: English to hindi. In *2019 ieee conference on information and communication technology* (pp. 1–6). IEEE. [doi:https://doi.org/10.1109/CICT48419.2019.9066238](https://doi.org/10.1109/CICT48419.2019.9066238)
- 26 **Laskar, Sahinur Rahman**, Pakray, P., & Bandyopadhyay, S. (2019). Neural machine translation: Hindi-nepali. In *Proceedings of the fourth conference on machine translation (volume 3)* (pp. 202–207). ACL. [doi:https://doi.org/10.18653/v1/W19-5427](https://doi.org/10.18653/v1/W19-5427)
- 27 **Laskar, Sahinur Rahman**, Singh, R. P., Pakray, P., & Bandyopadhyay, S. (2019). English to hindi multi-modal neural machine translation and hindi image captioning. In *Proceedings of the 6th workshop on asian translation, emnlp* (pp. 62–67). ACL. [doi:https://doi.org/10.18653/v1/D19-5205](https://doi.org/10.18653/v1/D19-5205)
- 28 Bhagawati, R., **Laskar, Sahinur Rahman**, & Swain, B. (2016). Documents clustering using quantum clustering algorithm. In *2016 international conference on microelectronics, computing and communications (microcom)* (pp. 1–4). IEEE. [doi:https://doi.org/10.1109/MicroCom.2016.7522562](https://doi.org/10.1109/MicroCom.2016.7522562)
- 29 **Laskar, Sahinur Rahman**, & Swain, B. (2015). Analyzing quantum probability ranking principle with the concept of hyperspace analogue to language (hal). In *2015 international symposium on advanced computing and communication (isacc)* (pp. 266–271). IEEE.
[doi:https://doi.org/10.1109/ISACC.2015.7377353](https://doi.org/10.1109/ISACC.2015.7377353)

Book Chapters (2)

- 1 **Laskar, Sahinur Rahman**, Khilji, A. F. U. R., Pakray, P., Kadir, R. A., Lydia, M. S., & Bandyopadhyay, S. (2022). *Healfavor: Machine translation enabled healthcare chat based application*.
[doi:https://doi.org/10.1201/9781003138013-6](https://doi.org/10.1201/9781003138013-6)
- 2 Khilji, A. F. U. R., **Laskar, Sahinur Rahman**, Pakray, P., Kadir, R. A., Lydia, M. S., & Bandyopadhyay, S. (2021). *Healfavor: A chatbot application in healthcare*. [doi:https://doi.org/10.1201/9781003146810-3](https://doi.org/10.1201/9781003146810-3)

Reviewer

- Journal of Experimental and Theoretical Artificial Intelligence (TETA)
- Transactions on Asian and Low-Resource Language Information Processing (TALLIP)
- Natural Language Engineering Journal (NLE)
- International Conference on Intelligence Computing Systems and Applications (ICICSA-2022) (Springer)
- IEEE, SILCON-2022
- Computer Vision, High Performance Computing, Smart Devices and Networks (CHSN 2022)
- International Conference on Machine Learning and Data Engineering (ICMLDE-2023)

Visibility

- Google Scholar Link: <https://scholar.google.com/citations?user=fbqD9i8AAAAJ&hl=en&authuser=2>
Citations: 358; h-index:11; i10-index:12 (Accessed on 08/07/2024)
- ResearchGate Link: <https://www.researchgate.net/profile/Sahinur-Laskar> Citations: 218; h-index: 9;
Research Interest Score: 198.5 (Accessed on 08/07/2024)
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- Scopus: <https://www.scopus.com/authid/detail.uri?authorId=57216695235>
- VIDWAN: <https://vidwan.inflibnet.ac.in/profile/414530>