

Swapnil Hingmire

CONTACT INFORMATION	Department of Data Science, IIT Palakkad, Palakkad-678623, Kerala, India	E-mail: swapnilh@iitpkd.ac.in E-mail: swapnilhingmire@gmail.com
RESEARCH INTERESTS	• Topic models • Natural language processing (text classification, co-reference resolution, information extraction, named entity recognition) • Machine learning	
EDUCATION	Indian Institute of Technology Madras , India M.S. and Ph.D., Computer Science and Engineering , January 2019 Thesis title: <i>Reducing Knowledge Acquisition Overhead for Text Classification</i> Advisor: Prof. Sutanu Chakraborti Walchand College of Engineering, Sangli , India B.E. (Bachelor of Engineering), Computer Science and Engineering, July 2007	
EXPERIENCE	Assistant Professor July 2024-present Department of Data Science, Indian Institute of Technology Palakkad Post-Doctoral Fellow March 2023 to June 2024 Department of Computer Science, University of Victoria <i>Family leave</i> July 2022 to March 2023 Assistant Professor December 2021 to July 2022 Department of Data Science, Indian Institute of Technology Palakkad Visiting TATA Scholar November 2019 to March 2020 LILY (Language, Information, and Learning at Yale) lab, Department of Computer Science, Yale University Scientist May 2015 to December 2021 Researcher December 2011 to April 2015 Developer November 2007 to November 2011 TCS Research, Tata Consultancy Services Limited	
JOURNAL PUBLICATIONS	1. Swapnil Hingmire, Ze Shi Li, Shiyu (Vivienne)Zeng, Ahmed Musa Awon, Luiz Franciscatto Guerra, Neil Ernst: “<i>Objectifying the Subjective: Cognitive Biases in Topic Interpretations</i>” Transactions of ACL (accepted for publication) doi:10.48550/arXiv.2507.19117 2. Girish K. Palshikar, Sachin Pawar, Anindita Sinha Banerjee, Rajiv Srivastava, Nitin Ramrakhiyani, Sangameshwar Patil, Devavrat Thosar, Jyoti Bhat, Ankita Jain, Swapnil Hingmire, Saheb Chaurasia, Payodhi Mandloi, Durgesh Chalavadi:	

“RINX: A system for information and knowledge extraction from resumes”.
Data Knowl. Eng. 147: 102202 (2023)
[doi:10.1016/j.datak.2023.102202](https://doi.org/10.1016/j.datak.2023.102202)

1. Irene Li, Alexander Fabbri, **Swapnil Hingmire**, Dragomir Radev: “*R-VGAE: Relational-variational Graph Autoencoder for Unsupervised Prerequisite Chain Learning.*”
COLING 2020
[doi:10.18653/v1/2020.coling-main.99](https://doi.org/10.18653/v1/2020.coling-main.99)
2. Girish K. Palshikar, Nitin Ramrakhiyani, Sangameshwar Patil, Sachin Pawar, **Swapnil Hingmire**, Vasudeva Varma and Pushpak Bhattacharyya: “*Extraction of Message Sequence Charts from Software Use-Case Descriptions.*”
NAACL-HLT, 2019 (Industry Papers)
[doi:10.18653/v1/n19-2017](https://doi.org/10.18653/v1/n19-2017)
3. Nitin Ramrakhiyani, **Swapnil Hingmire**, Sachin Pawar, Sangameshwar Patil, Girish K. Palshikar, Pushpak Bhattacharya, Vasudeva Varma: “*Resolving Actor Coreferences in Hindi Narrative Text.*”
ICON 2018
4. Sangameshwar Patil⁺, Sachin Pawar⁺, **Swapnil Hingmire**⁺, Girish K. Palshikar, Vasudeva Varma, Pushpak Bhattacharyya: “*Identification of Alias Links among Participants in Narratives.*”
ACL 2018 (+: Equal contribution)
[doi:10.18653/v1/P18-2011](https://doi.org/10.18653/v1/P18-2011)
5. Ajay Gupta, Devendra Verma, Sachin Pawar, Sangameshwar Patil, **Swapnil Hingmire**, Girish K. Palshikar, Pushpak Bhattacharyya: “*Identifying Participant Mentions and Resolving Their Coreferences in Legal Court Judgements.*”
TSD 2018
[doi:10.1007/978-3-030-00794-2_16](https://doi.org/10.1007/978-3-030-00794-2_16)
6. Nitin Ramrakhiyani, Sachin Pawar, **Swapnil Hingmire**, Girish Keshav Palshikar: “*Measuring Topic Coherence through Optimal Word Buckets.*”
EACL 2017
[doi:10.18653/v1/e17-2070](https://doi.org/10.18653/v1/e17-2070)
7. K. V. S. Dileep, **Swapnil Hingmire**, Sutanu Chakraborti: “*Complexity Guided Noise Filtering in QA Repositories.*”
FLAIRS Conference 2017
<https://aaai.org/ocs/index.php/FLAIRS/FLAIRS17/paper/view/15574>
- 8*. **Swapnil Hingmire**, Sutanu Chakraborti, Girish K. Palshikar, Abhay Sodani: “*WikiLDA: Towards More Effective Knowledge Acquisition in Topic Models using Wikipedia.*”
K-CAP 2017
[doi:10.1145/3148011.3154465](https://doi.org/10.1145/3148011.3154465)
9. Sachin Pawar, Nitin Ramrakhiyani, **Swapnil Hingmire**, Girish K. Palshikar: “*Topics and Label Propagation: Best of Both Worlds for Weakly Supervised Text Classification.*”
CICLing 2016
[doi:10.1007/978-3-319-75487-1_35](https://doi.org/10.1007/978-3-319-75487-1_35)

10. Rajiv Srivastava, **Swapnil Hingmire**, Girish K. Palshikar, Saheb Chaurasia, Arati Dixit: “*CSRS: A Context and Sequence Aware Recommendation System.*”
FIRE 2016
doi:10.1145/3015157.3015159
11. Sachin Pawar, Nitin Ramrakhiyani, Girish K. Palshikar, Pushpak Bhattacharyya, **Swapnil Hingmire**: “*Noun Phrase Chunking for Marathi using Distant Supervision.*”
ICON 2015
<https://www.aclweb.org/anthology/W15-5905/>
12. Abhijit Sahoo, **Swapnil Hingmire**, Sutanu Chakraborti: “*Adapting PageRank to Position Events in Time.*”
MIKE 2015
doi:10.1007/978-3-319-26832-3_50
13. Sachin Pawar, Nitin Ramrakhiyani, Girish K. Palshikar, **Swapnil Hingmire**: “*Deciphering Review Comments: Identifying Suggestions, Appreciations and Complaints.*”
NLDB 2015
doi:10.1007/978-3-319-19581-0_18
- 14*. **Swapnil Hingmire**, Sutanu Chakraborti: “*Sprinkling Topics for Weakly Supervised Text Classification.*”
ACL 2014
doi:10.3115/v1/p14-2010
15. Sachin Pawar, **Swapnil Hingmire**, Girish K. Palshikar: “*LMSim : Computing Domain-specific Semantic Word Similarities Using a Language Modeling Approach.*”
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<https://www.aclweb.org/anthology/W14-5116/>
- 16*. **Swapnil Hingmire**, Sutanu Chakraborti: “*Topic Labeled Text Classification: a Weakly Supervised Approach.*”
SIGIR 2014
doi:10.1145/2600428.2609565
- 17*. **Swapnil Hingmire**, Sandeep Chougule, Girish K. Palshikar, Sutanu Chakraborti: “*Document Classification by Topic Labeling.*”
SIGIR 2013
doi:10.1145/2484028.2484140

WORKSHOP
PUBLICATIONS

1. Irene Li, Thomas George, Alexander R. Fabbri, Tammy Liao, Benjamin Chen, Rina Kawamura, Richard Zhou, Vanessa Yan, **Swapnil Hingmire**, Dragomir Radev: “*A Transfer Learning Pipeline for Educational Resource Discovery with Application in Survey Generation*”.
BEA@ACL 2023
2. Sangameshwar Patil, Nitin Ramrakhiyani, **Swapnil Hingmire**, Alok Kumar, Girish K. Palshikar, Harsimran Bedi: “*Timeline as a Knowledge Representation for Retrieving Similar Safety Incidents from Industrial Repositories*”,
KnowledgeNLP@AAAI 2023
3. Nitin Ramrakhiyani, **Swapnil Hingmire**, Sangameshwar Patil, Alok Kumar, Girish K. Palshikar: “*Extracting Events from Industrial Incident Reports*”,
CASE@ACL-IJCNLP 2021

4. **Swapnil Hingmire**, Nitin Ramrakhiyani, Sangameshwar Patil, Avinash Kumar Singh, Girish Palshikar, Pushpak Bhattacharyya, Vasudeva Varma: “*Extracting Message Sequence Charts from Hindi Narrative Text.*”, **NUSE@ACL 2020** doi:10.18653/v1/2020.nuse-1.11
5. Rajiv Srivastava, **Swapnil Hingmire** and Girish Palshikar: “*Clustering Skills for Industrial Learning.*” **AI4EDU@AAAI 2020**
6. Girish Palshikar, Sachin Pawar, Sangameshwar Patil, **Swapnil Hingmire**, Nitin Ramrakhiyani, Harsimran Bedi, Pushpak Bhattacharyya and Vasudeva Varma: “*Extraction of Message Sequence Charts from Narrative History Text.*” **WNU@NAACL 2019**
7. Harsimran Bedi, Sangameshwar Patil, **Swapnil Hingmire**, Girish K. Palshikar: “*Event Timeline Generation from History Textbooks.*” **NLP-TEA@IJCNLP 2017**: 69-77
<https://www.aclweb.org/anthology/W17-5912/>
- 8*. **Swapnil Hingmire**, Sandeep Chougule, Girish K. Palshikar, Sutanu Chakraborti: “*Almost Unsupervised Document Content Filtering using Topic Models.*” **AND@COLING 2012**

*Publications with * are part of my PhD thesis.*

OTHER PUBLICATIONS

1. Irene Li, Thomas George, Alexander R. Fabbri, Tammy Liao, Benjamin Chen, Rina Kawamura, Richard Zhou, Vanessa Yan, **Swapnil Hingmire**, Dragomir R. Radev: “*A Transfer Learning Pipeline for Educational Resource Discovery with Application in Leading Paragraph Generation.*” **CoRR abs/2201.02312 (2022)**
<https://arxiv.org/abs/2201.02312>
2. **Swapnil Hingmire**⁺, Irene Li⁺, Rena Kawamura, Benjamin Chen, Alexander R. Fabbri, Xiangru Tang, Yixin Liu, Thomas George, Tammy Liao, Wai Pan Wong, Vanessa Yan, Richard Zhou, Girish K. Palshikar, Dragomir R. Radev: “*CLICKER: A Computational Linguistics Classification Scheme for Educational Resources.*” **CoRR abs/2112.08578 (2021)** (⁺: Equal contribution)
<https://arxiv.org/abs/2112.08578>

BOOK CHAPTERS

1. Girish K. Palshikar, Rajiv Srivastava, Sachin Pawar, **Swapnil Hingmire**, Ankita Jain, Saheb Chourasia, Mahek Shah: “*Analytics-Led Talent Acquisition for Improving Efficiency and Effectiveness*”, in A.K. Laha (ed.), *Advances in Analytics and Applications*, Springer Proceedings in Business and Economics, Springer Nature Singapore Pte. Ltd., 2019.
doi:10.1007/978-981-13-1208-3_13

PATENTS

1. Sangameshwar Patil, **Swapnil Hingmire**, Nitin Ramrakhiyani, Sachin Pawar, Harsimran Bedi, Girish K. Palshikar, Pushpak Bhattacharyya, Vasudeva Varma: “*Automated extraction of message sequence chart from textual description*” **US11210472B2**, Publication Date: December 28, 2021
2. **Swapnil Hingmire**, Sangameshwar Patil, Sachin Pawar, Girish K. Palshikar, Vasudeva Varma, Pushpak Bhattacharyya: “*Markov logic networks based alias links identification and canonical mention selection in text*” **US20190347325A1**, Publication Date: November 14, 2019

3. Rajiv Srivastava, Girish K. Palshikar, **Swapnil Hingmire**, Saheb Chourasia:
“*System and method for context and sequence aware recommendation* ”
US20180158164A1, **AU2017272253B2**, Publication Date: June 7, 2018
4. Manoj Apte, Sachin Pawar, Girish K. Palshikar, **Swapnil Hingmire**: “*System and method for evaluating reviewer’s ability to provide feedback* ”
US20170140043A1, **EP3159838A1**, Publication Date: May 18, 2017
5. Rajiv Srivastava, Girish K. Palshikar, Sangameshwar Patil, Pragati Dungarwal, Abhay Sodani, Sachin Pawar, Savita Bhat, **Swapnil Hingmire**: “*Methods and systems for ranking of human profiles* ”
US9710520B2, Publication Date: July 18, 2017

GENERAL DETAILS

Languages Known : Marathi (native), English, and Hindi (fluent)
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