Niranjan Pedanekar

Principal Scientist and Head – Media, Entertainment and Advertising Research Area

TCS Research and Innovation

Education

MS Mechanical – Purdue University, West Lafayette, USA

BE Mechanical – College of Engineering, Pune, India

Research Interests

Machine Learning, Deep Learning, Natural Language Processing, Information Visualization, Media Processing, Creativity, Performance Arts

Other Information

Niranjan is also a practising theatre writer and director. Having written, adapted/ translated 17 plays till date, his work has been featured in national and international theatre festivals. He is also the recipient of the Tendulkar-Dubey Fellowship awarded annually to five theatre artists all over India.

Recent Publications

1. Yashaswi Rauthan, Vatsala Singh, Rishabh Agrawal, Satej Kadlay, Niranjan Pedanekar, Shirish Karande, Manasi Malik, and Iaphi Tariang. Workshop on AI4TV. In 28th ACM International Conference on Multimedia (MM '20). ACM. 2020. (Accepted)
2. Stephen Pilli, Manasi Patwardhan, Niranjan Pedanekar and Shirish Karande. "Predicting Sentiments in Image Advertisements using Semantic Relations among Sentiment Labels." CVPR 2020, Workshop on Challenges and Promises of Inferring Emotion from Images and Video. 2020.
3. Joshi, Tanmayee, Sarath Sivaprasad, and Niranjan Pedanekar. "Partners in Crime: Utilizing Arousal-Valence Relationship for Continuous Prediction of Valence in Movies." In Proceedings of the AAAI-19 Workshop on Affective Content Analysis, Honolulu, USA, AAAI. 2019.
4. Joshi, Tanmayee, Sarath Sivaprasad, Savita Bhat, and Niranjan Pedanekar. "Multimodal Approach to Predicting Media Memorability." MediaEval 2018, France. 2018.

5. Saxena, Rohit, Savita Bhat, and Niranjan Pedanekar. "EmotionX-Area66: Predicting Emotions in Dialogues using Hierarchical Attention Network with Sequence Labeling." In Proceedings of the Sixth International Workshop on Natural Language Processing for Social Media, pp. 50-55. 2018.
6. Sivaprasad, Sarath, Tanmayee Joshi, Rishabh Agrawal, and Niranjan Pedanekar. "Multimodal Continuous Prediction of Emotions in Movies using Long Short-Term Memory Networks." In Proceedings of the 2018 ACM on International Conference on Multimedia Retrieval, pp. 413-419. ACM, 2018.
7. Bhole, Tejas, Tejas Mahajan, Nihar Gajare, Niraj Pandkar, Niranjan Pedanekar, and Shilpa Paygude. "Understanding Emotional and Effective Components of Advertisements." Towards Automatic Understanding of Visual Advertisements ADS Workshop at the 2018 Computer Vision and Pattern Recognition (CVPR) Conference. IEEE, 2018.
8. Saxena, Rohit, Savita Bhat, and Niranjan Pedanekar. "Live on TV, Alive on Twitter: Quantifying Continuous Partial Attention of Viewers During Live Television Telecasts." In 2017 IEEE International Conference on Data Mining Workshops (ICDM), pp. 1042-1049. IEEE, 2017.
9. Saxena, Rohit, and Niranjan Pedanekar. "I know what you coded last summer: Mining candidate expertise from github repositories." In Companion of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing, pp. 299-302. ACM, 2017.
10. Kumar, Varun, and Niranjan Pedanekar. "Mining shapes of expertise in online social Q&A communities." In Proceedings of the 19th ACM conference on computer supported cooperative work and social computing companion, pp. 317-320. ACM, 2016.
11. Doke, Abhay, and Niranjan Pedanekar. "Lights, Camera, but No Action: Exploring Affective Audio-Visual Features of Educational Videos." In Proceedings of the 47th ACM Technical Symposium on Computing Science Education, pp. 686-686. ACM, 2016.
12. Singh, Gaurav Kumar, Varun Kumar, Savita Bhat, and Niranjan Pedanekar. "Automatically augmenting learning material with practical questions to increase its relevance." In 2015 IEEE Frontiers in Education Conference (FIE), pp. 1-7. IEEE, 2015.
13. Kumar, Varun, Savita Bhat, and Niranjan Pedanekar. "Stickipedia: A Search Engine and Repository for Explanatory Analogies." In 2015 IEEE 15th International Conference on Advanced Learning Technologies, pp. 280-284. IEEE, 2015.
14. Singh, Gaurav Kumar, Abhay Doke, Varun Kumar, Savita Bhat, and Niranjan Pedanekar. "MOOClens: A Peek into MOOCs for Picking MOOCs." IEEE Infovis, Paris. 2014.
15. Kumar, Varun, Savita Bhat, and Niranjan Pedanekar. "Familiarity breeds understanding Recommending explanatory analogies to learners." In 2014 IEEE International Conference on Teaching, Assessment and Learning for Engineering (TALE), pp. 371-374. IEEE, 2014.
16. Doke, Abhay, Gaurav Kumar Singh, Varun Kumar, Savita Bhat, and Niranjan Pedanekar. "Which hat are you wearing today? Enabling perspectives while learning computer science." In 2014 IEEE Frontiers in Education Conference (FIE) Proceedings, pp. 1-4. IEEE, 2014.
17. Singh, Gaurav Kumar, Abhay Doke, Varun Kumar, Savita Bhat, and Niranjan Pedanekar. "Assessing the Need of Augmenting Video Lectures with Supporting Information." In International Conference on Learning and Collaboration Technologies, pp. 238-249. Springer, Cham, 2014.

18. Kumar, Varun, Savita Bhat, and Niranjan Pedanekar. "Automatically retrieving explanatory analogies from webpages." In European Conference on Information Retrieval, pp. 481-486. Springer, Cham, 2014.
19. Gandhi, Naman, Vinit Gaikwad, Pratik Kasat, Nikita Garg, Abhay Doke, Varun Kumar, Shirish Karande, Vijayanand Banahatti, and Niranjan Pedanekar. "PUSTACK: towards an augmented, scalable and personalized interface for paper textbooks." In Proceedings of the 11th Asia Pacific Conference on Computer Human Interaction, pp. 174-177. ACM, 2013.
20. Nair, Vikram, Vijayanand Banahatti, and Niranjan Pedanekar. "TAGZILLA: tag-based file storage and retrieval." In International Conference on Human Interface and the Management of Information, pp. 505-514. Springer, Berlin, Heidelberg, 2013.
21. Ramanand, Janardhanan, Krishna Bhavsar, and Niranjan Pedanekar. "Wishful thinking: finding suggestions and'buy'wishes from product reviews." In Proceedings of the NAACL HLT 2010 workshop on computational approaches to analysis and generation of emotion in text, pp. 54-61. Association for Computational Linguistics, 2010.
22. Vin, Harrick, Niranjan Pedanekar, Ashutosh Chauhan, and Vijayanand Banahatti. "Systematic Evolution of IT Plants: The Sense-Understand-Respond (SURe) Way." In Proceedings of TACTiCS conference. 2006.
23. Pedanekar, Niranjan R., B. Venkoba Rao, P. Kapur, Rick Harbuck, and Michael Mischke. "Profile-based prediction: an enhanced methodology for prediction of track degradation." In Proceedings of the AREMA 2003: Annual Railroad Conference, pp. 5-8. 2003.
24. Malhotra, Chetan P., Niranjan R. Pedanekar, and Satyam S. Sahay. "Cost modeling and optimization of industrial processes: a case study for steel reheating operations." ICAMMP-2002: International Conference on Advances in Materials Processing, pp. 634-638. 2002.
25. Malhotra, Chetan P., Niranjan R. Pedanekar, and Satyam S. Sahay. "Cost model for a steel-reheating operation." Industrial heating 69, no. 3 (2002): 67-70.
26. Pedanekar, N. R., B. Basu, and Pradip Majumdar. "Mathematical modeling of evaporative removal of materials using high energy laser beam." In International Congress on Applications of Lasers & Electro-Optics, vol. 1997, no. 1, pp. C159-C168. LIA, 1997.
27. Pedanekar, Niranjan R., Huiqi Yin, and Normand M. Laurendeau. "Atmospheric thermometry for metallic surfaces by laser-induced second-harmonic generation." Applied optics 35, no. 21 (1996): 4169-4172.