

# Profile

**Name:** Dr. Nita V. Patil

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**Academic Qualification:** M.Sc. (Information Technology)  
SET (Computer Applications)  
Ph.D. (Information Technology)

**Teaching Experience:** 20 Years

**Research Area:** Natural Language Processing  
Information Extraction

**Prizes Received:**

- 1. First Prize:** Poster, "Automatic Identification of Person Names from Natural Language Text Using N-GRAM Model", presented in University Level Research Festival: Avishkar-2013, North Maharashtra University, Jalgaon, dt. 18th and 19th Oct 2013.
- 2. First Prize:** Poster, "Named Entity Recognizer for Marathi", University Level Research Festival: Avishkar-2015, North Maharashtra University, Jalgaon, dt. 22<sup>nd</sup> and 23<sup>rd</sup> December 2015.
- 3. Second Prize:** Poster, "Named Entity Recognition system for Marathi", 10<sup>th</sup> Maharashtra State Inter-University Research Convention: Avishkar-2015, Savitribai Phule Pune University, Pune, dt. 10 to 12 January 2016.

**Research project completed:**

<b>Name of Investigator</b>	<b>Title of Project</b>	<b>Duration</b>	<b>Amount Sanctioned</b>	<b>Funding Agency</b>
Dr. Nita V. Patil (PI) Prof. B. V. Pawar (Co-PI)	Investigation of Linguistic Resources Required for Named Entity Recognition	2 Years 2013-2015	70,000/-	VCRMS, North Maharashtra University, Jalgaon
Dr. Nita V. Patil (PI) Prof. B. V. Pawar (Co-PI)	Designing Stochastic Named Entity Recognizer for NLP and Information Retrieval	2 Years 2016-2018	2,60,000/-	Rajiv Gandhi Science & Technology Commission (RGSTC), Govt. of Maharashtra

**International Journals:**

1. Nita Patil, Ajay Patil and, B. V. Pawar, "Named Entity Recognition using Conditional Random Fields", Procedia of Computer Science, Elsevier, Vol. 167, pp. 1181-1188, January, 2020.
2. Sunil Patil, Nita Patil and, Ajay Patil, "Development of ASR system based on isolated words of Ahirani spoken language: A Dialect of Khandesh", Our Heritage, Vol. 68, Issue. 27, 2020.
3. Sunil B. Patil, Nita V. Patil, Ajay S. Patil, "Speaker-Independent Isolated Word Recognition using HTK for Varhadi – a Dialect of Marathi", International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249 – 8958, Volume-9 Issue-3, pp. 748-751, February, 2020.
4. Sunil Patil, Nita Patil and, Ajay Patil, "Development of Isolated Malvani Spoken Word ASR System based on Hidden Markov Model", International Journal of Computer Research & Technology (IJCRT), Vol. 5, Issue-2, pp. 241-244, 2019.
5. Sunil Patil, Nita Patil and, Ajay Patil, "Automatic Speech Recognition (ASR) System for Isolated Marathi Words: using HTK", International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol. 8 Issue-12, pp. 3702-3705, 2019.

6. Nita Patil, "POS Tagging for Marathi Language using Hidden Markov Model", International Journal of Computer Sciences and Engineering, Volume-6, Issue-1, pp. 409-412, 2018.
7. R. Srivaramangai, Nita Patil, Ajay S. Patil, "Feature Extraction of Colon and Rectum Cancer from MRI Images", International Journal of Advanced Research in Computer Science, Vol. 9, No. 1, 2018, pp.-746-754.
8. N. T. Mhaske, Ajay S. Patil, Nita Patil, "Extracting Subjective Information Systems", International Journal of Information Systems, Vol. 8, Issue. 2, 2018, pp. 133-137.
9. Nita Patil, Ajay S Patil & B V Pawar, "Issues and Challenges in Marathi Named Entity Recognition", International Journal of Natural Language Computing (2278 – 1307) Vol.5, No. 1, Feb. 2016, pp. 15-30.
10. Nita Patil, Ajay S Patil & B V Pawar, "Survey of Named Entity Recognition Systems with respect to Indian and Foreign Languages.", International Journal of Computer Applications Vol. 134, Issue. 16, January 2016, pp.21-26.
11. V.P. Mahajan. N.V. Patil, H.B. Patil & Ajay S. Patil, "Study and Analysis of Web Log and User Behaviour using Web Mining Techniques", Journal of Chemo and Biosphere, ISSN: 2277-4238, Vol. 1 Issue: 4, 2013, pp. 146-151.

#### **Proceedings of International Conferences:**

1. Nita Patil, Ajay Patil and B. V. Pawar, "Named Entity Recognition for Marathi: Gazetteer and Pattern Matching Approach", 4th International Conference on Next Generation Computing Technologies (NGCT 2018), University of Petroleum & Energy Studies, Dehradun[Presented].
2. N. V. Patil, Ajay S. Patil & B. V. Pawar, "Hybrid Approach for Marathi Named Entity Recognition", Proceedings of the 14th International Conference on Natural Language Processing (ICON-2017), 2017, pp.103-111.
3. N. V. Patil, Ajay S. Patil & B. V. Pawar, "HMM based Named Entity Recognition for inflectional language", International Conference on Computer, Communications and Electronics (Comptelix)-2017, PP. 565-572.
4. N. V. Patil, Ajay S. Patil & B. V. Pawar, "Performance Evaluation of Search Engines: A Comparative Study", in Proceedings of International Conference on Recent Trends in Information Technology and Computer Science (ICRTITCS-

2011), Thakur Educational Trust's Thakur College of Science and Commerce in Association University of Mumbai, Mumbai, dt. 9th and 10th December 2011. ISBN 978-81-922978-1-1.

### **Proceedings of National Conferences:**

1. Nita Patil and B. V. Pawar, "An Overview of Named Entity Recognition", RESEARCH JOURNEY: International Multidisciplinary E- Research Journal, Special Issue 178: Recent Trends in Management, Computer Science and Applications (NCRTMCSA - 2019), ISSN :2348-7143, April 2019, pp. 180-182.
2. N. V. Patil, "Application of Natural Language Processing Techniques in e-Business", in UGC Sponsored one day National Research Conference on Contemporary Issues in Commerce, Management & I.T. organized by School of Management Studies, North Maharashtra University, Jalgaon on December 24, 2013.
3. N. V. Patil, H. B. Patil, A. S. Patil and B.V. Pawar, "The state-of-the-art of Named Entity Recognition for Natural Language Processing", National Conference on Emerging Trends in Computer Science and Computer Applications. Organized by D.E.S.'s Fergusson College, Pune, on 7th – 8th Dec. 2013 pp 1-8.
4. N. V. Patil, H. B. Patil, A. S. Patil and B.V. Pawar, "A Domain Specific Stop-word List for Marathi Text Retrieval Systems", National Conference on Emerging Trends in Computer Science and Computer Applications. Organized by D.E.S.'s Fergusson College, Pune, on 7th – 8th Dec. 2013 pp 9-13.
5. N. V. Patil, Ajay S. Patil & B. V. Pawar, "Comparative study of Named Entity Detection on Informal Text and News Items Using Natural Language Toolkit (NLTK)", Proceedings of UGC Sponsored two days National Conference on Advances in Computing-2012 Department of Computer Science, North Maharashtra University, Jalgaon dt. 5th and 6th March 2013.
6. N. V. Patil, Ajay S. Patil & B. V. Pawar, "Relevance Evaluation of Major Search Engines for Searching Nutrition Related Information" in Proceedings of UGC Sponsored two days National Conference on Advances in Computing-2011 Department of Computer Science, North Maharashtra University, Jalgaon dt. 24th and 25th February 2011.

7. N. V. Patil, Ajay S. Patil & B. V. Pawar , “Role of Information and Communication Technologies in Indian Rural Development: An Overview”, in Proceedings of AICTE Sponsored Two days National Seminar on Sustainable Rural Development: A strategic Roadmap for Economic Excellence organized by Department of Management Studies, North Maharashtra University, Jalgaon dt. 25th & 26th September 2008.

**Poster Presentations:**

1. “Rule based NER System for Marathi Language”, National Conference on Advances in Computing (NCAC-2018) organized by School of Computer Sciences, KBCNMU, Jalgaon on 21st February 2018.
2. Named Entity Recognizer for Marathi Language, State Level Research Festival: Avishkar-2015, Savitribai Phule Pune University, Pune, dt. 10-12th January 2016.
3. Stochastic Named Entity Recognizer for Marathi Language”, University Level Research Festival: Avishkar-2015, North Maharashtra University, Jalgaon, dt. 22-23rd December 2015.
4. Stochastic Named Entity Recognizer for Marathi Language”, District Level Research Festival: Avishkar-2015, North Maharashtra University, Jalgaon, dt. 22nd November 2015
5. Development of Named Entity Recognition System, NLPIP, Organized by School of Computer Sciences, North Maharashtra University, Jalgaon, dt. 14 – 15th March 2015.
6. Development of Named Entity Tagged Corpus and Demonstration of its use in Named Entity Recognition Using HMM, University Level Research Festival: Avishkar-2013, North Maharashtra University, Jalgaon, dt. 17-18th October 2014.
7. Development of Named Entity Tagged Corpus and Demonstration of its use in Named Entity Recognition Using HMM, District Level Research Festival: Avishkar-2013, North Maharashtra University, Jalgaon, dt. 7th October 2014.
8. Automatic Identification of Person Names from Natural Language Text Using N-GRAM Model, State Level Research Festival: Avishkar-2013, North Maharashtra University, Jalgaon, dt. 16-18th January 2014

9. Automatic Identification of Person Names from Natural Language Text Using N-GRAM Model, University Level Research Festival: Avishkar-2013, North Maharashtra University, Jalgaon, dt. 18-19th December 2013 University
10. Automatic Identification of Person Names from Natural Language Text Using N-GRAM Model, District Level Research Festival: Avishkar-2013, North Maharashtra University, Jalgaon, dt. 5th October 2013.
11. Named Entity Recognition for Marathi Language, University Level Research Festival: Avishkar-2011, North Maharashtra University, Jalgaon, 28-29th December, 2011
12. "An Overview of Web Log Mining: Concept and Applications ", University Level Research Festival: Avishkar-2010, North Maharashtra University, Jalgaon, 23-24 December 2010.

### **Workshops Attended:**

1. Participated in Online Workshop on Evidence Based Teaching and Learning Strategies (EBTLSHE), organized by CREATES, IISER Bhopal, during 20-22 July 2020 under the PMMMNMTT scheme of MHRD.
2. Participated in the workshop on International Workshop of Artificial Intelligence-Reasoning and Learning organized by Department of Computer Science and Engineering, The Northcap University, Gurugram on 6<sup>th</sup> September 2019.
3. Participated in one day workshop on "Wikipedia Vector Graphics Localization" jointly organized by School of Computer Sciences and CIS on 15th March 2019.
4. Participated in National Workshop on Advances in Computing (Theme: Natural Language Processing, Image Processing & Information Retrieval) organized by School of Computer Sciences KBCNMU, Jalgaon during 20-21 February 2019
5. Participated in two days training program on "Leadership: Creating Direction, Setting goals, Defining Tasks" conducted by Prof. Jan Buleca, TUKE University, Slovakia organized by CABGIN Consortia Project and ERASMUS+ at KBCNMU on 8th -9th October 2018.
6. Participated in two days training program on "Personal Development and Intellectual Honesty" conducted by Prof. Joao Sevilhano, NOVA University,

- Lisbon, Portugal organized by CABCIN Consortia Project and ERASMUS+ at KBCNMU on 17-18 September 2018.
7. Participated in two days training program on “Assessment and Grading” conducted by Dr. Panos C. Constantinides, Fredrick University, Cyprus, organized by CABCIN Consortia Project and ERASMUS+ at KBCNMU on 29th - 30th August 2018.
  8. Participated in two days training program on “Diversity Management at workplace in the context of HEI” conducted by Prof. Magdalena Weglarz, University of Wroclaw, Poland organized by CABCIN Consortia Project and ERASMUS+ at KBCNMU on 19th -20th July 2018.
  9. Participated in one day National Seminar on “विज्ञान आणि तंत्रज्ञान आधारे संपत्तीनिमिती” jointly organized by KBCNMU, Jalgaon and Marathi Vidnyan Parishad, Mumbai, on 14th July 2018.
  10. Participated in two days Faculty Development Program on Industry Level C and C++ Programming organized jointly by KBCNMU, Jalgaon and Quick Heal Foundation under the Quick Heal Faculty Connect program on 12-13rd July 2018.
  11. Participated in Human Language Comprehension and Psycholinguistics Models: Approach, Experiments, and Inference (17 December 2017), 14th International Conference on Natural Language Processing (ICON-2017) at Jadhavpur Univerisity Kolkata, India.
  12. Participated in One Day Workshop at School Environmental and Earth Sciences for effective use of Antiplagiarism Software organized by Central Library, NMU, Jalgaon, on 7th July 2017.
  13. Participated in one-day State Level Workshop on “माझा संगणक आणि माय मराठी” at School of Computer Sciences, North Maharashtra University, Jalgaon, on 10th March 2017.
  14. Participated in Training Programming on Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013, organized by Women Study Center, North Maharashtra University, Jalgaon, on 1st February 2017.

15. Participated in National Conference on Advances in Computing (NCAC-2017) held at School of Computer Sciences, North Maharashtra University, Jalgaon, during 24th-25th March 2017.
16. Participated in one-day Workshop on “Indian Patenting and Filing” organized by School of Environmental and Earth Sciences, North Maharashtra University, Jalgaon, on 23rd August 2016.
17. Participated in two-day workshop on “IBM Watson IoT Platform” organized by the School of Computer Sciences, NMU, Jalgaon, during 18th and 19th October 2016.
18. Participated in three days National Workshop on Natural Language Processing & Image Processing (NWNLPIP-2016) organized by School of Computer Sciences, North Maharashtra University, Jalgaon, dt. 21st to 23rd January 2016.
19. Participated in two days National Level Seminar on “Changing Dimensions of Human Rights and Duties” organized by School of Law and School of Social Sciences, North Maharashtra University, Jalgaon during 17th and 18th July 2015.
20. Two Days National Seminar on Natural Language Processing and Image Processing (NLPIP) conducted by School of Computer Sciences, North Maharashtra University, Jalgaon, dt. 14 – 15th March 2015.
21. Participated in three days U.G.C., New Delhi sponsored National Workshop on Advances in Computing (NWAC-2015) organized by School Computer Sciences, North Maharashtra University, Jalgaon during 1st – 3rd March 2015.
22. Participated in Workshop on “Use of Smart Classroom Facilities” organized by Computer Center and Central Library, North Maharashtra University, Jalgaon on 8th December 2014.
23. Participated in six days U.G.C., New Delhi sponsored National workshop on Advances in Computing (NWAC-2014) held at School of Computer Sciences, N. M. U., Jalgaon during 10-15 February 2014.
24. Participated in Two Days National Level Workshop on Research Papers Writing and Publishing using Latex at Kaveri College of Science and Commerce, Pune, dt. 8-9th February 2013.
25. Participated in UGC Sponsored two days National Seminar on Natural Language Processing and Image Processing organized by Department of Computer Science, North Maharashtra University, Jalgaon dt. 16th and 17th January 2012



26. Attended 5 days workshop on “Research Methodology”, organized by the North Maharashtra University during September 20 – 24, 2012.
27. Participated in UGC Sponsored two days National Conference on Advances in Computing- 2012(NCAC-2012) organized by Department of Computer Science, North Maharashtra University, Jalgaon dt. 16th and 17th March 2012.
28. Participated in UGC Sponsored 5 days workshop on “Women Managers in Higher Education”, organized by women’s studies center North Maharashtra University, Jalgaon dt. 19-23rd October 2010.
29. Participated in Workshop on Patent Awareness held on the 4th August 2008 sponsored by ITFAC, DST (Govt. Of India), New Delhi at North Maharashtra University, Jalgaon.
30. Participated in Workshop on Advances in Web Computing, organized by Department of Computer Science, NMU, Jalgaon dt. 9th & 10th February 2002.
31. Participated in National Conference on Recent Trends in Information Communication Technology & Applications, organized by NMU, Jalgaon dt. 10th & 11th October 2002.

#### **Academic Courses Participated:**

1. Participated in U.G.C. sponsored Orientation Course at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (M.S.) during 01/12/2012 to 29/12/2012.
2. Participated in U.G.C. sponsored Special Summer School program at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (M.S.) during 05/06/2013 to 25/06/2013.
3. Participated in U.G.C. sponsored Refresher Course in “Ethics, Yoga and Spirituality” at HRDC, Nainital, Uttarakhand during 10/03/2018 to 30/03/2018.
4. Short Term Faculty Development Program on Research Methodology of HRDC, Savitribai Phule Pune University, Pune conducted by KBCNMU, Jalgaon during 17th – 23rd December 2018.
5. Participated in Faculty Development Program on “Epoch Making Indian Thinkers And Their Thoughts For Social Reconstruction (Information Technology)” conducted at the School of Thoughts, KBC North Maharashtra University, Jalgaon

- from 16/09/2019 to 22/09/2019 Organized by Savitribai Phule Pune University under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching.
6. Participated in 5 days online faculty development program on “Evolution from offline to online teaching”, organized by Satish Pradhan Dnyanasadhana College, Thane in association with Department of Information Technology, University of Mumbai and Yashwantrao Chavan Maharashtra Open University, Mumbai from 30th May-2020 to 3rd June 2020.
  7. Participated in Two Week Online Faculty Development Program On “Managing Online Classes and Co-Creating Moocs 3.0”, Organized by Teaching Learning Centre & Research Development and Services Cell Ramanujan College, University of Delhi during 25th July – 10th August 2020.