

**Bio Data
Of
Dr. Arwinder Singh**

1. **Name:** Dr. Arwinder Singh
2. **Qualification:** B.C.A., M.C.A., UGC-Net, Ph. D.
3. **Designation:** Assistant Professor in Computer Science
4. **Date of Birth:** 24/08/1988
5. **Permanent Address:** Vill. Kamal Wala, Teh. Zira, Dist. Ferozepur (152021)
6. **Contacts:** Mb. 9417119175, Email: arwindersingh13@gmail.com, arwinder@pbi.ac.in
7. **Research Topic:** Development of an Algorithm for Paraphrase Generation in Punjabi Language.
8. **Teaching Experience:** Assistant Professor in Computer Science (Regular) in University College, Ghanaur.

Academic Achievements

- ❖ Papers Presented in Conferences/Seminars Proceedings: 02
- ❖ Papers Presented in Conferences/Seminars: 04
- ❖ Papers Published in Research Journals: 05
- ❖ Workshops/Conferences Attended: 08

❖ Short-Term Courses/Faculty Development Programs: 09

❖ Newspaper Articles: 01

Short-Term Courses/Faculty Development Programs

1. Attended *UGC-Sponsored Orientation Programme*, organized from 02-02-2014 to 28-06-2014 by Academic Staff College, Punjabi University, Patiala.
2. Attended *UGC-Sponsored Refresher Course in Research Methodology in Sciences (Interdisciplinary)* organized by UGC-Human Resource Development Centre, Panjab University, Chandigarh from 30-08-2018 to 19-09-2018.
3. Attended *UGC-Sponsored Winter School (Equivalent to one Refresher Course-MD) (Theme: Environmental Concerns)* organized by UGC-Human Resource Development Centre, Kumaun University, Nainital from 16-12-2021 to 30-12-2021.
4. Attended *Short-Term Course in Moocs online Courses and Open Educational Resources* organized by the UGC-Human Resource Development Centre, Punjabi University, Patiala from 13-12-2022 to 20-12-2022.
5. Attended *UGC-Sponsored Refresher Course in Artificial Intelligence and Machine Learning* organized by UGC-Human Resource Development Centre, Punjabi University, Patiala from 09-01-2023 to 21-01-2023.
6. Attended Faculty Development Program on *Artificial Intelligence and Machine Learning* organized by National Institute of Electronics and Information Technology (NIELIT), Chandigarh.
7. Attended One Week Faculty Development Program on Machine Learning, Deep Learning and Natural Language Processing Toolkit with Hands on Practice organized by Department of Computer Science and Engineering, Chandigarh University, Gharuan, Mohali from 02 August, 2021 to 06 August, 2021.
8. Attended One-Day webinar on Augmented Reality Virtual Reality organized by Department of Computer Science in collaboration with National Institute of Electronics and Information Technology (NIELIT), Ropar on 14-07-2021.
9. Attended One-Day webinar on Digital Initiatives for the Transformation of Rural Punjab organized by Centre for E-Learning and Teaching Excellence on 21-07-2021.

SOFTWARE DEVELOPED

1. Developed website of Mata Sundri University Girls College, Mansa, A Constituent College of Punjabi University, Patiala.
2. Developed college management system which can handle the students in online mode. Also, helpful to manage fees and scholarships of students.
3. Developed online counselling portal for Punjabi University, Patiala.
4. Developed a web crawler for extracting news headlines and articles of Punjabi from online news websites.
5. Developed a tool for paraphrase detection in Punjabi language and also published this work as a conference paper.
6. Developed a paraphrase generation model for Punjabi. The system is able to generate paraphrase for Punjabi news headlines.

LIST OF PUBLICATIONS

1. Papers in Research Journals:

- a. The Word Space Model: An Introduction. In proceedings of International Journal of Scientific Research in Computer Science Applications and Management Studies. Vol. 7, Issue 3 (May 2018), ISSN 2319-1953, 2018.
- b. Arwinder Singh, Gurpreet Singh Josan," Construction of Paraphrasing Dataset for Punjabi: A Deep Learning Approach", In International Journal of Advanced Science and Technology, Vol. 29, No. 6, 2020, pp. 9433 9442.
- c. Arwinder Singh, Gurpreet Singh Josan" An Augmented Encoder to Generate and Evaluate Paraphrases in Punjabi Language". Turkish Journal of Computer and Mathematics Education, Vol. 12 No. 13, 2021, pp 134 151.

- d. Arwinder Singh, Gurpreet Singh Josan” Paraphrase Generation: A Review from RNN to Transformer based Approaches”, accepted for publication in International Journal of NextGeneration Computing.
- e. Arwinder Singh, Gurpreet Singh Josan” Apply Paraphrase Generation for Finding and Ranking Similar News Headlines in Punjabi Language”, communicated to Journal of Scientific Research.

2. Papers in Conference/Seminar Proceedings:

- a) *“The Role of Information Technology in Cricket”*, Presented in National Seminar on IMPORTANCE OF SPORTS & PHYSICAL EDUCATION, 18TH Feb, 2017, organized at Mata Sundri University Girls College, Mansa.
- b) • Arwinder Singh, Gurpreet Singh Josan” A Deep Network Model for Paraphrase Detection in Punjabi”, In Proceedings of ICRIC 2020, Recent Innovations in Computing, pp. 173185. ISBN No.: 9789811582974 (Springer Publication)

3. Papers Presented in Conferences/Seminars:

- a. *“Impact of ICT on Education and Sustainable Development”*, Presented in Two Day National Seminar on Education for Sustainable Development, February 13-14, 2015, organized by Department of Education, Punjabi University Regional Centre, Bathinda.
- b. *“Impact of ICT in Education”*, Presented in National Conference on EMERGING ISSUES IN INDIA, 25th April, 2017, held by Nehru Memorial Government College, Mansa.
- c. *“How to Learn Programming”*, Presented in Seminar on *“Computer Technologies”* on 17th November, 2017, organized by Department of Computer Science of Mai Bhago Degree College (For Girls), Ralla.
- d. The importance of Mathematical Concepts for Detecting Semantic Similarity Between Texts”, presented in International Conference on Evolution in Pure & Applied Mathematics organized by Department of Mathematics, Akal University, Talwandi Sabo, Bathinda, Punjab (India) during November 16-18, 2022.

4. Chapters in Books:

5. List of Conferences/Workshops attended:

1. Workshop on "*Business Intelligence*" held at University Institute of Engineering and Technology, Chandigarh on 24th February, 2012, conducted by Infosys Limited, Chandigarh Development Centre.
2. Participated in the Short-Term Course in Workshop on the *Use of Software Technology*, from 16-01-2015 to 22-01-2015, organized by Academic Staff College, Guru Nanak Dev University, Amritsar.
3. Third Regional International Conference on Natural Language Processing (reglCON2015), September 18-19, 2015, organized at Department of Computer Science, Punjabi University, Patiala.
4. International Conference on *Recent Innovations in Science, Agriculture, Engineering and Management*, 20th November, 2017, held at University College of Computer Applications, Guru Kashi University, Talwandi Sabo.
5. International Conference on Natural Language Processing (ICON-2018), 15th-18th December, 2018, organized by Department of Computer Science, Punjabi University, Patiala, Punjab, India.
6. Attended *One Week Indo-German SPARC Symposium cum Workshop on Recent Advances in Machine Translation (RAMT-2021)* organized by National Institute of Technology, Silchar, Assam held during March 15-19, 2021.
7. Attended Seven Day Online Workshop on Punjabi Language and Computer organized by Department of Punjabi, University of Delhi, Delhi and Research Centre for Technical Development of Punjabi Language, Literature and Culture, Punjabi University, Patiala from January 18, 2022 to January 24, 2022.
8. Participated in 'SAMVIT-2k22-An International Conference' organized by Department of Computer Science and IQAC in association with Computer Society of India (CSI), Bangalore on August 30, 2022.