DR. ARCHANA GOYAL

Assistant Professor

PG Department of Computer Science and Applications GGDSD COLLEGE Chandigarh India -160030

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DOB: 7th January 1981



Educational Qualifications

Ph.D. in Computer Science

Department of Computer Science and Applications, Panjab University Chandigarh, India (2022) PhD Thesis: *Bilingual Named Entity Recognition System in Hindi and Punjabi Text*, Ph.D. Supervisor: Dr. Manish Kumar, Co-Supervisor: Dr. Vishal Gupta

M.Phil. (Computer Science) University Center for Distance Learning, Chaudhari Devi Lal University, Sirsa, India (2007) MCA - Kurukshetra University, Kurukshetra, India (2001-2004) Bachelor of Commerce (Vocational) Department of Commerce, Radha Krishan Sanatan Dharam College, Kaithal, Haryana, India (1998-2001)

Teaching/Research Experience

• July 2013- till date

Assistant Professor (Contractual) in Department of Computer Science and Applications, GGDSD College, Chandigarh Teaching Programming Languages, Database Management Systems, Scripting Languages, Operating System, Data Structures, Web Technologies, Web Application Development using PHP at Graduate and Post-graduate level

• July 2008- June 2013

Assistant Professor (Adhoc) in Department of Computer Science and Applications, GGDSD College, Chandigarh Taught Programming Languages, Database Management Systems, Operating System, Data Structures, Web Technologies and Scripting Languages at Graduate and Post-graduate level

Areas of Interest

• Artificial Intelligence, Natural Language Processing, Machine/Deep Learning

Publications (Journal/Book Chapters)

Journal Publications:

- **Archana Goyal**, Vishal Gupta and Manish Kumar. A deep neural framework for named entity recognition with boosted word embeddings. Multimedia Tools and Applications, pp.1-14, 2023. **SPRINGER**.
- Archana Goyal, Vishal Gupta and Manish Kumar. Deep Learning-Based Named Entity Recognition System Using Hybrid Embedding. Cybernetics and Systems, pp.1-23, 2022. TAYLOR & FRANCIS.
- Archana Goyal, Vishal Gupta and Manish Kumar. A deep learning-based bilingual Hindi and Punjabi named entity recognition system using enhanced word embeddings. KNOWLEDGE-BASED SYSTEMS, 234, p.107601, 2021. ELSEVIER.
- Archana Goyal, Vishal Gupta and Manish Kumar.
 Recurrent Neural Network-Based Model for Named Entity
 Recognition with Improved Word Embeddings. IETE

JOURNAL OF RESEARCH, pp.1-7, 2021. **TAYLOR & FRANCIS.**

- **Archana Goyal**, Vishal Gupta and Manish Kumar. Recent named entity recognition and classification techniques: a systematic review. COMPUTER SCIENCE REVIEW, 29, pp.21-43, 2018. **ELSEVIER**.
- Archana Goyal, Vishal Gupta and Manish Kumar. Named entity recognition: applications, approaches and challenges. INTERNATIONAL JOURNAL OF ADVANCE RESEARCH IN SCIENCE AND ENGINEERING, 35(5), pp.482-489, 2017.
- Archana Goyal, Vishal Gupta and Manish Kumar. A survey of language identification techniques and applications. JOURNAL OF EMERGING TECHNOLOGIES IN WEB INTELLIGENCE, 6(4), pp.388-400, 2014.

Book Chapters:

- Archana Goyal, Vishal Gupta and Manish Kumar. Analysis of Different Supervised Techniques for Named Entity Recognition. In *International Conference on Advanced Informatics for Computing Research*, pp. 184-195, 2019, June. SPRINGER, Singapore.
- Archana Goyal. N-Gram Algorithm for resolving word sense ambiguity. In proceedings of National Seminar on Emerging Trends in Information Technology: Challenges and Strategies organized by GGDSD college, Chandigarh, 2014, January.
- Archana Goyal, Vishal Goyal. Word Sense Disambiguation. In proceedings of National Conference on Futuristic trends in engineering & technology organized by JCDM college of Engineering, Sirsa, 2008, January.

Seminars/ Conferences/Symposiums (Paper Presented)

Refresher Courses/Workshops/ Training Programmes

- Presented paper entitled "Supervised Learning Method used for Named Entity Recognition" in ICSSR sponsored National Seminar on 'Recent Trends in Information Technology' on 25.03.22 conducted by the Department of Information Technology, GGDSD College, Sector 32, Chandigarh.
 - Online NEP 2020 orientation and sensitization programme from 16.02.2024 to 29.02.2024 under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by UGC-Malaviya Mission Teacher Training Centre (MMTTC), Panjab University, Chandigarh.
 - One-Week National Faculty Development Program jointly organized by Goswami Ganesh Dutta Sanatan Dharma College, Chandigarh and Guru Angad Dev Malaviya Mission Teacher Training Centre, SGTB Khalsa College, University of Delhi on the topic of "Subject-Specific Benchmarking of

- Learning Outcomes: Outcome-Based Education" from 26th October to 1st November, 2023.
- An online skill enhancement course/workshop on "Programming in Python" Conducted from 24thApril to 30th April, 2023 organized by DCSA, Panjab University, Chandigarh under the aegis of RUSA.
- An online skill enhancement course/workshop on "Introduction to Data Science" Conducted from 1st to 21st February, 2023 organized by DCSA, Panjab University, Chandigarh under the aegis of RUSA.
- one-week National Workshop on "Data Analytics using R/R-Studio (Quantitative and Qualitative Methods" conducted by School of Management Studies, Punjabi University, Patiala from 16th Sep. to 21th Sep., 2022.
- Attended Third International Conference on Advance Informatics for Computing Research (ICAICR-2019) held during 15-16 June, 2019 at Shimla, India.
- 2-days workshop on "Machine Learning and Artificial Intelligence" conducted by the Electronics & ICT Academy, IIT Roorkee at Panjab University, Chandigarh from 19th-20th January, 2019.
- One-week International Faculty Development Programme "Instructional Skills Workshop (ISW) organized by GGDSD College, Chandigarh from 11 December, 2017 to 17 December, 2017.
- Workshop and training programme on "Automation System in Education sector" organized by GGDSD College, Chandigarh from 18 February, 2016 to 20 February, 2016.
- Workshop and training programme on "Use of e-Resource Contents/Learning Exchange System-Teaching Methodology" organized by GGDSD College, Chandigarh from 18 February, 2016 to 20 February, 2016.
- Attended Third Regional International Conference on "Natural Language Processing" Organized by department of Computer Science, Punjabi University, Patiala from 18-19 September, 2015.
- One-week National workshop on Multilingual Technologies organized by Punjabi University, Patiala from 11-17th November, 2013.
- Participated in the International Faculty Development Programme organized by University of the Fraser Valley and GGDSD College, Chandigarh from 29 April, 2013 to 3 May, 2013.

Training Courses:

 Completed Innovation Ambassador Training "Foundation Level" conducted in online mode by MoE's Innovation Cell and AICTE during the Academic Year 2022-2023.

Invited Talks

• NIL

Projects

NIL

MOOCS/Online Content

NIL

M. Phil Dissertation Supervised • NIL

PhD Thesis

• NIL

Administrative Experience

- Member of college admission committee of under and post graduate courses of Information Technology
- Member of college Institution Innovation Council (IIC)
- Coordinator of Time Table Uploading Committee (Science Stream)

Membership of Economic Associations • NIL

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