# Shashank Gupta

**E-mail:** s.gupta2@uva.nl **Google Scholar Profile:** https://bit.ly/2E6bw7W
**Github:** https://github.com/shashankg7
**Contact No.:** +31-0643225590 **Web-Page:** http://shashank-gupta.com/


**RESEARCH INTERESTS**

Information retrieval, Machine learning, Causal inference.

**EDUCATION**

**University of Amsterdam (UvA)**
*PhD*, ML and IR, April 2021 - Current
*Advisors:* Dr. Maarten de Rijke, UvA
Dr. Harrie Oosterhuis, Radboud University
*Research Group:* **The Information Retrieval Lab (IRLab).**

**International Institute of Information Technology (IIIT)**, Hyderabad
*Master of Science By Research*, Computer Science and Engineering, June 2015 - Dec'17
*Advisors:* Dr. Vasudeva Varma, Dean R&D, IIIT-Hyderabad
Dr. Manish Gupta, Principal Applied Scientist, Microsoft, Hyderabad
*Research Group:* **Information Retrieval and Extraction Laboratory (IREL).**

**Birla Institute of Technology**, Mesra, India
*Bachelor Of Technology*, Computer Science and Engineering, June 2010 - June 2014.

**PROFESSIONAL ACTIVITIES**

**Reviewer:** ACL-RR(21), NeuRIPS(20-22), ICML(20-22), ICLR(21-22), AAAI'21, EMNLP(20-21), ECIR(19-21), CIKM'21, ACL'21, IJCNLP'20, IRJ, ML4H@NIPS 17-18
**Teaching Assistant:** Advanced Information Retrieval, UvA (2022), Information Retrieval and Extraction, IIIT-H (2018), Machine Learning, IIIT-Hyderabad (2017), Machine Learning, BITS-Pilani (2015).

**RELEVANT EXPERIENCE**

**Flipkart, Bangalore, India**
*Data Scientist, Search Ranking Team*, July 2018 - Jan 2021
*Mentor:* Mohit Kumar.
Worked on learning to rank methods for personalized search. Worked with terabyte scale log data using PySpark and Tensorflow. Also worked on the problem of session length prediction for user's incoming search session to help disambiguate their explore v/s purchase intent (SIGIR'20).

**Conduent Labs (erstwhile Xerox Research (XRCI))**, Bangalore, India
*Research Internship*, Jan 2018 - May 2018
*Mentors:* Manjira Sinha & Sandya Mannarswamy
Worked on the problem of fake news detection. Proposed a novel Coupled Matrix-Tensor Factorization (CMTF) based solution for the probblem (ASONAM'18).

**Tata Research, Design and Development Center**, Pune, India
*Research Internship*, May 2017 - July 2017
*Mentors:* Girish Palshikar, Sachin Pawar & Nitin Ramrakhiyani
Worked on semi-supervised and multi-task learning based methods for Adverse Drug Reaction (ADR) mention extraction from social media posts (ECIR'18, CIKM'17 and NeuRIPS'17 workshop).

**JOURNAL PUBLICATIONS**

**Semi-Supervised Recurrent Neural Network for Adverse Drug Reaction Mention Extraction**
Shashank Gupta, Sachin Pawar, Nitin Ramrakhiyani, Girish Keshav Palshikar, Vasudeva Varma
BMC Bioinformatics Special Issue (Presented at CIKM 2017)

**CONFERENCE PUBLICATIONS**

**VAE-IPS: A Deep Generative Recommendation Method for Unbiased Learning From Implicit Feedback**
Shashank Gupta, Harrie Oosterhuis, and Maarten de Rijke
RecSys 2022 CONSEQUENCES+REVEAL workshop, 2022 (**Oral Presentation**).

**The University of Amsterdam at the TREC 2021 Fair Ranking Track**
Ali Vardasbi, Gabriel Bndict, Shashank Gupta, Maria Heuss, Pooya Khandel, Ming Li, Fatemeh Sarvi
TREC Fair Ranking Trec 21.

**Predicting Session Length for Product Search on E-commerce Platform**
Shashank Gupta, Subhadeep Maji
SIGIR 2020, Short (2 citations).

**On Application of Bayesian Parametric and Non-parametric Models for User Cohorting in Product Search**
Shashank Gupta
ECNLP@ACL20, Position paper (2 citations).

**RARE: A Recurrent Attentive Recommendation Engine for News Aggregators**
Vaibhav Kumar, Dhruv Khattar, Shashank Gupta, Manish Gupta, and Vasudeva Varma
CIKM 2018, Workshop on News Recommendation and Analytics (INRA 2018).

**CIMTDetect: A Community Infused Matrix-Tensor Coupled Factorization Based Method for Fake News Detection**
Shashank Gupta, Raghuveer Thirukovalluru, Manjira Sinha, and Sandya Mannarswamy.
ASONAM 2018, Short (41 citations).

**Multi-Task Learning for Extraction of Adverse Drug Reaction Mentions from Tweets**
Shashank Gupta, Manish Gupta, Vasudeva Varma, Sachin Pawar, Nitin Ramrakhiyani, Girish Keshav Palshikar
ECIR 2018 (Full) and NIPS 2017 ML4H Workshop (11 citations).

**A Co-training Based Method for Extraction of Adverse Drug Reaction Mentions from Tweets**
Shashank Gupta, Manish Gupta, Vasudeva Varma, Sachin Pawar, Nitin Ramrakhiyani, Girish Keshav Palshikar
ECIR 2018 (Short) and NIPS 2017 ML4H Workshop (16 citations).

**TCS Research at TAC 2017: Joint Extraction of Entities and Relations from Drug Labels using an Ensemble of Neural Networks**
Sachin Pawar, Nitin Ramrakhiyani, Girish Keshav Palshikar, Shashank Gupta, Vasudeva Varma
TAC 2017 ADR Track (2 citations).

**Semi-Supervised Recurrent Neural Network for Adverse Drug Reaction Mention Extraction**
Shashank Gupta, Sachin Pawar, Nitin Ramrakhiyani, Girish Keshav Palshikar, and Vasudeva Varma
CIKM 2017, Workshop on Data and Text Mining in Biomedical informatics, and BMC Bioinformatics Special Issue (47 citations).

**Enhancing Categorization of Computer Science Research Papers using Knowledge Bases**,
Shashank Gupta, Priya Radhakrishnan, Manish Gupta, Vasudeva Varma
SIGIR 2017, Works. on Knowledge Graphs & Semantics for Text Retrieval & Analysis (2 citations).

**Deep Neural Architectures for News Recommendation**,
Vaibhav Kumar, Dhruv Khattar, Shashank Gupta, Manish Gupta, Vasudeva Varma
Conference and Labs of the Evaluation Forum (CLEF) 2017 (50 citations).

**Simultaneous Inference of User Representations and Trust**,
Shashank Gupta, Pulkit Parikh, Manish Gupta, Vasudeva Varma
ASONAM 17, Short.

**Deep Learning for Hate Speech Detection in Tweets**
Pinkesh Badjatiya*, Shashank Gupta*, Manish Gupta, Vasudeva Varma **(*Equal Contribution)(Best Poster Award)**
WWW 2017, Poster track (***986 citations***).

**Scientific Article Recommendation by using Distributed Representations of Text and Graph**
Shashank Gupta, Vasudeva Varma
WWW 2017, Workshop track (57 citations).

**User Profiling based Deep Neural Network for Temporal News Recommendation**
Vaibhav Kumar, Dhruv Khattar, Shashank Gupta, Manish Gupta, and Vasudeva Varma
ICDM 2017, Workshop Track (11 citations).

**Word Semantics based 3D Convolutional Neural Networks for News Recommendation**
Vaibhav Kumar, Dhruv Khattar, Shashank Gupta and Vasudeva Varma
ICDM 2017, Workshop track (12 citations).

**SKILLS & TOOLS**

PyTorch, Keras, Scikit-Learn, Tensorflow, Theano
Lucene, ElasticSearch
Python, MATLAB, C, C++, Java

**AWARD AND ACHIEVEMENTS**

Received the **Best Poster Paper Award** at International World Wide Web Conference **(WWW) 2017**.
Work on hate speech detection got covered in The Hindu, Indian Express and few other leading news outlets. **http://bit.ly/2k9FnFi**
Travel Grant to attend NIPS 2017.
TCS Research travel grant for attending CIKM'17.
Selected to attend IISC's Winter School on Machine Learning 2015.

**RELEVANT COURSEWORK**

Machine Learning
Information Retrieval and Extraction
Topics in Information Retrieval
Topics in Natural Language Processing
Digital Image Processing

**STUDENT SUPERVISION**

Srijan Kaur (Masters UvA 2022): Knowledge distillation for efficient user modelling.

**TALKS**

*VAE-IPS: A Deep Generative Recommendation Method for Unbiased Learning From Implicit Feedback*, To be presented at CONSEQUENCES+REVEAL workshop@RecSys'22.
*Session Length Prediction for Product Search on E-commerce Platform*, Presented at SIGIR, 2020 **https://dl.acm.org/doi/abs/10.1145/3397271.3401219**
*Scientific Article Recommendation using Deep Embeddings*, Presented at World Wide Web Conference, Perth, 2017 **http://bit.ly/2nfmhi3**
*Trust Prediction in Social Network using Deep Neural Networks*, Presented at ASONAM conference, Sydney, 2017 **http://bit.ly/2zya7CF**
*Semi-supervised Recurrent Neural Network for Adverse Drug Reaction Mention Extraction from Twitter*, Presented at CIKM Conference, Singapore, 2017 **http://bit.ly/2AHby5Y**
*Pharmacovigilance from Social Media using Multi-task and Semi-Supervised Learning*, Presented at ECIR Conference, Grenoble, 2018
*Machine Learning Methods for Mining Adverse Drug Reactions from Social Media*, Presented at DUKE-NUS Medical School, Singapore, 2017
*Deep Learning Methods for Recommendation Systems*, Presented at Thiagarajar College of Engineering, Madurai
*Information Retrieval from Social Media*, Presented at Alumni Research Talk (ART), BITS Pilani, Pilani.