Shashank Gupta

E-mail: s.gupta2@uva.nl **Google Scholar Profile:** https://bit.ly/2E6bw7W
Github: https://github.com/shashankg7
Blog: http://shashank-gupta.com/blog/ **Web-Page:** http://shashank-gupta.com/

RESEARCH INTERESTS

Information Retrieval, Machine Learning, Conversational Recommendation Systems, Causal Inference.

EDUCATION

University of Amsterdam
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, 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(20-21), 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: Information Retrieval and Extraction, IIIT-H (under Prof. Vasudeva Varma), **Machine Learning, IIIT-Hyderabad** (under Prof. C.V. Jawahar), **Machine Learning, BITS-Pilani** (under Prof. Navneet Goyal)

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. Also worked on the problem of Session Length Prediction for user's incoming search session to help disambiguate his 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 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).

CONFERENCE PUBLICATIONS

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 Paper.

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

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 Paper)

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 Paper) and NIPS 2017 ML4H Workshop.

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 Paper) and NIPS 2017 ML4H Workshop.

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

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 (11th Workshop on Data and Text Mining in Biomedical informatics and BMC Bioinformatics Special Issue)

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)

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.

Simultaneous Inference of User Representations and Trust,
Shashank Gupta, Pulkit Parikh, Manish Gupta, Vasudeva Varma
Inter. Conf. on Advances in Social Networks Analysis and Mining (ASONAM) 2017

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

Intern. Conf. on World Wide Web Companion (WWW) 2017 (Poster Track)

Scientific Article Recommendation by using Distributed Representations of Text and Graph
Shashank Gupta, Vasudeva Varma
Intern. Conf. on World Wide Web Companion (WWW) 2017 (Workshop Track)

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)

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

UNDER REVIEW

Neural Bag-of-Words Point Process Model for User Return Time Prediction in E-commerce
Shashank Gupta, Manish Bansal (Work done at Flipkart)

SKILLS & TOOLS

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

SELECTED PROJECTS

Trust-Prediction in Social Network using Optimization based algorithms and Auto-encoders, April 2016 - July 2016
Worked on the problem of Trust-Prediction amongst users in a social network using linear models and Neural-Network based non-linear Matrix Factorization methods. The goal was to predict trust relationship between pair of users based on their social network.

Sandhan, Cross Lingual Information Access System, Jan 2017 - June 2017
A multi-institutional project funded by Department of Defence (Govt. of India) where my responsibilities were to contribute to the query processing pipeline which involves development of query translation and transliteration engine to enable cross language search in 9 different Indian Languages.

AWARD AND ACHIEVEMENTS

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.
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**

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 (Ongoing project)

TALKS

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

INVITED TALKS

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.