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

Information Retrieval, Machine Learning, Conversational Recommendation Systems,

INTERESTS 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

 ${\it Master of Science By Research}, {\it Computer Science and Engineering}, {\it June~2015-Dec'17}$

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

PROFESSIONA ACTIVITIES

PROFESSIONAL Reviewer: 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

PUBLICATIONS 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

 $\underline{Shashank~Gupta},$ Raghuveer Thirukovalluru, Manjira Sinha and Sandya Mannarswamy. $\underline{ASONAM~2018}$ (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, <u>Shashank Gupta</u>, Vasudeva Varma

TAC 2017 ADR Track

Semi-Supervised Recurrent Neural Network for Adverse Drug Reaction Mention Extraction

 $\underline{\text{Shashank Gupta}}, \, \text{Sachin Pawar}, \, \text{Nitin Ramrakhiyani}, \, \text{Girish Keshav Palshikar}, \, \text{and} \, \overline{\text{Vasudeva Varma}}$

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, <u>Shashank Gupta</u> 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 ACHIEVE-MENTS

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

WORK 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

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.