Suman Kalyan Maity

IBM PhD Fellow (2016 - present), Microsoft Research India PhD Fellow (2014-2016)

CONTACT
INFORMATION

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Indian Institute of Technology Kharagpur,
Kharagpur – 721302,
West Bengal, India.

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RESEARCH
INTERESTS

Social Computing, Data Mining and Machine Learning

EDUCATION

Indian Institute of Technology Kharagpur, WB, India.

- pursuing PhD in Computer Science and Engineering [2013 - Jan 2018 (Expected)]

Indian Institute of Technology Kharagpur, WB, India.

- MS in Computer Science and Engineering (2011-2013)
- **CGPA: 9.28/10** (MS Thesis defended on 13th Feb, 2014)

National Institute of Technology Durgapur, WB, India.

- B.Tech in Computer Science and Engineering (2011)
- **CGPA: 9.22/10**

PUBLICATIONS

Suman Kalyan Maity, Abhishek Panigrahi, Animesh Mukherjee, "Book Reading Behavior on Goodreads Can Predict the Amazon Best Sellers", in proceedings of 2017 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (**ASONAM '17**), Sydney, Australia, July 31 - Aug 3, 2017

Binny Mathew, **Suman Kalyan Maity**, Pratip Sarkar, Animesh Mukherjee and Pawan Goyal, " Adapting predominant and novel sense discovery algorithms for identifying corpus-specific sense differences", in proceedings of **TextGraphs 2017**, in conjunction with 55th annual meeting of the Association for Computational Linguistics (**ACL**), Vancouver, Canada, July 30 - Aug 4, 2017

Santosh K C, **Suman Kalyan Maity**, Arjun Mukherjee, "ENWalk: Learning Network Features for Spam Detection in Twitter", in proceedings of **SBP 2017**, Washington, USA July 5-8, 2017

Suman Kalyan Maity, Aman Kharb, Animesh Mukherjee, "Language Use Matters: Analysis of the Linguistic Structure of Question Texts can Characterize Answerability in Quora", in proceedings of 11th International Conference on Web and Social Media (**ICWSM '17**), Montreal, Canada, May 15 - 18, 2017

Suman Kalyan Maity, Aishik Chakraborty, Pawan Goyal, Animesh Mukherjee, "Detection of Sockpuppets in Social Media", in proceedings of the 20th ACM Conference on Computer-Supported Cooperative Work and Social Computing (**CSCW '17**) Companion, Portland, USA, Feb 25 - Mar 1, 2017.

Suman Kalyan Maity "Understanding Popularity of Social Media Entities: from hashtags to question topics", in proceedings of the 20th ACM Conference on Computer-Supported Cooperative Work and Social Computing (**CSCW '17**), Portland, USA, Feb 25 - Mar 1, 2017 (Doctoral Consortium paper).

Suman Kalyan Maity, Chandra Bhanu Jha, Avinash Kumar, Ayan Sengupta, Madhur Modi and Animesh Mukherjee, "A Large-scale Analysis of the Marketplace Characteristics in Fiverr", in proceedings of 50th Hawaii International Conference on System Sciences (**HICSS-50**), Big Island, Hawaii, USA, Jan 4 - 7, 2017.

Suman Kalyan Maity, Chaitanya Sarda, Anshit Chaudhary, Abhijeet Patil, Shraman Kumar, Akash Mondal, Animesh Mukherjee, "WASSUP? LOL : Characterizing Out-of-Vocabulary Words in Twitter", in proceedings of 19th ACM Conference on Computer-Supported Cooperative Work and Social Computing (**CSCW '16**) Companion, San Francisco, USA, Feb 27 - Mar 2, 2016.

Suman Kalyan Maity, Ritvik Saraf, Animesh Mukherjee, "#Bieber + #Blast = #BieberBlast: Early prediction of popular hashtag compounds", in proceedings of 19th ACM Conference on Computer-Supported Cooperative Work and Social Computing (**CSCW '16**), San Francisco, USA, Feb 27 - Mar 2, 2016 (**received Best Paper Honorable Mention Award**). This paper also appears in MIT Technology Review news.

Suman Kalyan Maity, Bhadreswar Ghuku, Abhishek Upmanyu and Animesh Mukherjee, "Out of vocabulary words decrease, running texts prevail and hashtags coalesce: Twitter as an evolving sociolinguistic system", in proceedings of 49th Hawaii International Conference on System Sciences (**HICSS-49**), Kauai, Hawaii, USA, Jan 5 - 8, 2016. This paper appears in MIT Technology Review news.

Suman Kalyan Maity, Jot Sarup Singh Sahni, Animesh Mukherjee "Analysis and Prediction of Question Topic Popularity in Community QA Sites: A Case Study of Quora", in proceedings of 9th International Conference on Web and Social Media (**ICWSM '15**), Oxford, UK May 26 - 29, 2015

Suman Kalyan Maity, Abhishek Gupta, Pawan Goyal and Animesh Mukherjee "A Stratified Learning Approach for Predicting the Popularity of Twitter Idioms", in proceedings of 9th International Conference on Web and Social Media (**ICWSM '15**), Oxford, UK May 26 - 29, 2015

Suman Kalyan Maity, and Animesh Mukherjee, "Emergence of dominant opinions in presence of rigid individuals in social network", book chapter in "Towards a Theoretical Framework for Analyzing Complex Linguistic Networks", pp 279-295, 2015

Sunny Mitra, Ritwik Mitra, **Suman Kalyan Maity**, Martin Riedl, Chris Biemann, Pawan Goyal and Animesh Mukherjee, "An automatic approach to identify word sense changes in text media across timescales", Journal of Natural Language Engineering (**JNLE**), 1(1): 1-30, 2014

Tanmoy Chakraborty, **Suman Kalyan Maity**, Rishiraj Saha Roy and Animesh Mukherjee, "Emergence ", (a book chapter in the book **"Keywords of Systemic Vision"**, ISBN 978-3-659-52781-4, published by Lambert Editions)

Suman Kalyan Maity, T.Venkata Manoj, and Animesh Mukherjee, "Opinion dynamics in correlated time-varying social networks" in proceedings of the 2014 ASE International Conference on Social Computing (**SocialCom '14**), Stanford, CA, USA, May 27 - 31, 2014

Suman Kalyan Maity, Abhishek Porwal and Animesh Mukherjee, "Understanding how learning affects agreement process in social networks", in Proceedings of the 2013 ASE/IEEE International Conference on Social Computing (**SocialCom '13**), Washington DC, USA, September 8 - 14, 2013

Suman Kalyan Maity, Animesh Mukherjee, Francesca Tria and Vittorio Loreto, "Emergence of fast agreement in an overhearing population: The case of the naming game", in **Europhysics Letters (EPL)**, IOPscience Publishers, Volume 101, Number 6 (2013)

Suman Kalyan Maity, T.Venkat Manoj and Animesh Mukherjee, "Opinion formation in time-varying social networks: The case of Naming Game", **Physical Review E (PRE)**, 86, 036110 (2012)

Suman Kalyan Maity, and Animesh Mukherjee, "Understanding how dominance affects the emergence of agreement in a social network: The case of Naming Game" in proceedings of 2012 IEEE/ASE International Conference on Social Computing (**SocialCom '12**), Amsterdam, The Netherlands

SCHOLASTIC ACHIEVEMENTS AND PROFESSIONAL ACTIVITIES

- Selected to participate in 5th Hiedelberg Laureate Forum 2017 (HLF 2017)

- Awarded IBM PhD Fellowship (August, 2016)

- Best paper Honorable Mention Award at CSCW '17 for our paper "#Bieber + #Blast = #BieberBlast: Early prediction of popular hashtag compounds"

- Awarded Microsoft Research India PhD Fellowship (June, 2014)

- Selected for Microsoft TechVista 2015 for PhD poster presentation

- Ranked 2nd in B.Tech (Computer Science And Engineering), NIT Durgapur

- School Topper in Secondary Examination, 2005 and ranked 32 in West Bengal, India

- Referee of Physics Letters A (PLA), Nuerocomputing, HICSS-49, HICSS-51, KNOSYS

INTERNSHIPS

University of Houston, Texas, USA, May '17 - July '17
Topic : Rumor Detection in social networks

University of Houston, Texas, USA, June '16 - September '16
Topic : Spam Detection in social networks

Wroclaw University of Technology, Wroclaw, Poland, August '15 - September '15
Topic : Microscopic models of language variation and change

Wroclaw University of Technology, Wroclaw, Poland, July '14
Topic : Emergence and evolution of language variation in stable society

ISI Foundation, Turin, Italy, May '14 - June '14
Topic : Importance of context on the emergence of fragmentation in agreement dynamics

Bielefeld University, Bielefeld, Germany, July '13
Topic : Microscopic models for the emergence and evolution of language variation

ISI Foundation, Turin, Italy, May '13 - June '13
Topic : Effect of context on the emergence of consensus in agreement dynamics

IIT Kharagpur, May '10 - July '10
Topic : Impact of mobility models on Information Spreading on Wireless Mobile Network

ACADEMIC
PROJECTS
UNDERTAKEN

Title : Developed a browser plug-in for Search Trail Suggestion at Yahoo Hack U '13.
Duration : March '13.

Title : Analysing the impact of group performance in Test Cricket (Term Project).
Duration : February '13 - April '13.

Title : Developed a small-scale search engine capable of retrieving information to domain queries (Term Project).
Duration : August '11 - October '11.

Title : Routing in Delay Tolerant Network (B.Tech. Final Year Project).
Supervisor : Prof. Sanjib Sadhu, NIT Durgapur.
Duration : July '10 - May '11.

Title : Impact of mobility models on Information Spreading on Wireless Mobile Network
Supervisor : Prof. Niloy Ganguly, IIT Kharagpur.
Duration : May '10 - July '10.

TRAVEL
ASSISTANCE

- **ICWSM 2017** student travel award to attend ICWSM 2017 at Montreal, Canada.

- **SIGCHI Gary Marsden Fund** to attend CSCW 2017 at Portland, USA.

- **Google India** travel grant to attend CSCW 2016 at San Francisco, USA.

- ACM India-IARCS travel grant, International Society of Service Innovation Professionals (ISSIP) and IBM travel award for attending HICSS 2016 at Kauai, HI, USA.

- **Google India** and **Flipkart Internet Pvt. Ltd.** travel grant to attend ICWSM 2015 at Oxford, UK

- **ACM SIGMETRICS** and **COMPUTER PERFORMANCE** travel grant to attend IFIP WG 7.3 PERFORMANCE 2014 at Turin, Italy.

- **Google India** travel grant to attend SOCIALCOM 2013 at Washington DC, USA.

- Travel grant from **UNESCO Chair in Data Privacy** and **Dept. of CSE, IIT Kharagpur** to attend SOCIALCOM 2012 at Amsterdam, The Netherlands.

- Travel grant from **MPI-PKS, Dresden, Germany** and **Dept. of CSE, IIT Kharagpur** to attend MAPCON 2012 at Dresden, Germany.

- **ACM student travel grant** to attend SIGCOMM 2010 at New Delhi, India

TEACHING
ASSISTANTSHIPS

- Programming & Data Structure Lab and Theory - Autumn 2011-2012, Spring 2011-2012, Autumn 2012-2013

- Complex Networks Theory - Spring 2012-2013, Spring 2014-2015, Spring 2015-2016

- Discrete Structures - Autumn 2013-2014

- Information Retrieval - Spring 2013-2014, Spring 2016-2017, Spring 2017-2018

- Algorithms - Autumn 2017-2018

- Social Computing - Autumn 2014-2015

Computer Skills **Programming Languages :** C, $C++$, $Python$
Scripts : Bash Shell, C Shell, Perl.
Tools Extensively Used : GDB, Matlab, Gnuplot, Xmgrace, MySQL, ONE Simulator, LaTeX.
Other Tools : Weka, Pajek, NS2, NS3.
Web Technologies : HTML, PHP, Javascript, CSS, XML, JSP.
Operating Systems : Linux, Windows, Android.