

Varun Gangal

2nd Year PhD Student, CMU LTI

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vgtomahawk.github.io

RESEARCH AREAS

Natural Language Processing, Social Network Analysis

EDUCATION

- **Language Technologies Institute, CMU** Pittsburgh, Pennsylvania
PhD in Language Technologies; **GPA:** 4.0 Sep. 2016 – Ongoing
 - **Advisor:** Eduard Hovy
 - Key Courses: *Grammars & Lexicons, Machine Translation, Algorithms for NLP*
- **Indian Institute of Technology, Madras (IIT-M)** Chennai, India
B.Tech/M.Tech. in Computer Science and Engineering; **CGPA:** 9.27/10 Aug. 2011 – May. 2016
 - **Advisor:** Balaraman Ravindran
 - Key Electives: *Machine Learning, NLP, Reinforcement Learning, Memory Based Reasoning, Searching & Indexing, Knowledge Representation, Distributed Algorithms, Ontologies, Graph Theory*
 - Core Courses: *Networks, Databases, Operating Systems, Automata Theory, Compilers, Algorithms*
 - **GRE:** 337/340 (**Quant:** 170/170 **Verbal:** 167/170 **Analytical Writing:** 5.5/6)
 - **TOEFL:** 118/120 (**Reading:** 30/30 **Writing:** 30/30 **Listening:** 30/30 **Speaking:** 28/30)

AWARDS & ACHIEVEMENTS

- IIT JEE, 2011: All India Rank of 623 from amongst \cong 400000 students
- NIPS 2015, Montreal: Funded through a Joint Science Project between IIT-M and IBM Research, India to attend the conference and present the NIPS Networks Workshop paper which I co-authored.

PUBLICATIONS

- “Charmanteau: Character Embedding Models For Portmanteau Creation” [[ARXIV](#)][[DEMO](#)][[CODE](#)][[DATA](#)]
Authors: Varun Gangal, Harsh Jhamtani, Graham Neubig, Eduard Hovy, Eric Nyberg
Accepted for **EMNLP 2017, Copenhagen**
- “Detecting and Explaining Causes From Text For a Time Series Event” [[ARXIV](#)]
Authors: Dongyeop Kang, Varun Gangal, Ang Lu, Zheng Chen, Eduard Hovy
Accepted for **EMNLP 2017, Copenhagen**
- “Shakespearizing Modern Language Using Copy-Enriched Sequence-to-Sequence Models” [[ARXIV](#)][[CODE](#)]
Authors: Varun Gangal, Harsh Jhamtani, Eduard Hovy, Eric Nyberg
Accepted for **EMNLP 2017 Workshop on Stylistic Variation, Copenhagen**
- “HEMI: Hyperedge Majority Influence Maximization” [[PDF](#)]
Authors: Varun Gangal, Balaraman Ravindran, Ramasuri Narayanam
Accepted for **The Second IJCAI Workshop on Social Influence Analysis (SocInf 2016), New York**
- “Trust And Distrust Across Coalitions: Shapley Value Centrality Measures For Signed Networks” [[PDF](#)]
Authors: Varun Gangal, Abhishek Narwekar, Balaraman Ravindran, Ramasuri Narayanam
Accepted for **AAAI Student Abstract 2016**
- “Trust And Distrust Across Coalitions: Shapley Value Centrality Measures For Signed Networks” [[PDF](#)]
Authors: Varun Gangal, Abhishek Narwekar, Balaraman Ravindran, Ramasuri Narayanam
Accepted for **NIPS 2015 Workshop on Networks In the Social And Information Sciences**

PROFESSIONAL EXPERIENCE

- **Building Ad Customer Profile Using ML (CUPRUM)** Bing Ads Team, Microsoft India
Mentor : [Prashant Rajoria](#) May – July 2014
 - Worked on building models of various aspects of Bing advertisers such as spamminess, malware and serveability using supervised machine learning methods, based on features from their ad pages.

- **Centrality and Influence in Unconventional Social Networks**

IBM Research, India

Mentor : [Ramasuri Narayanam](#)

May – July 2015

- Worked on centrality measures for unconventional social networks such as signed networks, multiplex networks and hypergraphs

TEACHING EXPERIENCE

- **Teaching Assistant - Machine Learning, Fall 2015** IIT Madras
- **Teaching Assistant - Machine Learning MOOC, Spring 2016** NPTEL & IIT Madras
- **Teaching Assistant - Reinforcement Learning, Spring 2016** IIT Madras

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, Matlab, C++, C
- **Tools & Libraries :** PyTorch, NLTK, NetworkX, Python-igraph, Scikit-Learn, Django

CO CURRICULAR ACTIVITIES

- **Reporting & Writing**
 - Correspondent For T5E ¹, 2012-2013 & 2014-2015
 - Co-Author, Immerse² 2015 - Authored an article on Evolutionary Game Theory. [[ARTICLE](#)]
- **Social Initiatives**
 - NSS ³ Project Representative, Wikipedia Translation to Marathi - Part of a team of 3 representatives co-guiding a team of 10 volunteers for the translation of 60 educational Wikipedia articles on science, mathematics and history from English to Marathi, my native language.

¹IIT Madras news body

²IIT-M research magazine

³ National Service Scheme, IIT Madras.