

Meghana Moorthy Bhat

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| CONTACT INFORMATION | 1444 North High Street, A15, Columbus, OH 43201 <i>Website:</i> https://meghu2791.github.io/ | <i>E-mail:</i> meghanamoorthy@gmail.com mbhat2@wisc.edu <i>Phone:</i> +1 9497507299 |
| INTERESTS | NLP, fairness and model interpretability. | |
| EDUCATION | Ohio State University , Columbus, OH, USA <i>Ph.D in Computer Science</i> August 2019 - Present | |
| | University of Wisconsin-Madison , Madison, WI, USA <i>Master of Science, Computer Science</i> Sep 2017 - May 2019 (CGPA: 3.6/4.0) | |
| | Sri Jayachamarajendra College of Engineering (SJCE) , Mysore, India <i>Bachelor of Engineering (Honours), Computer Science</i> Sep 2008 - Jun 2012 (CGPA: 9.21/10) | |
| RESEARCH EXPERIENCE | Research Intern , Microsoft Research, Redmond, WA (Remote) <i>Adviser:</i> Saghar Hosseini , Ahmed Hassan Awadallah , Paul Bennett , Weisheng Li May 2020 - Aug 2020 <ul style="list-style-type: none"><i>Taxonomy:</i> Determining classes and hierarchies of toxic language beyond offensive language.<i>Data Collection:</i> Employing different techniques like weak supervision and self-training to address sparsity of toxic language in email conversations.<i>Ongoing:</i> Evaluation and analysis. | |
| | Research Intern , Mila, Montreal, QC <i>Adviser:</i> Prof. Laurent Charlin June 2019 - Present | |
| | TPMS: Proposed methodology to assign reviewers for the submitted papers in conferences using Microsoft CMT. <ul style="list-style-type: none"><i>Document Representation:</i> Studied auto-encoders, pre-trained models like BERT to represent documents.<i>Evaluation:</i> Explored clustering and supervised learning approaches inspired from Siamese networks.<i>Ongoing:</i> Investigating the relevance and fairness of our proposed models in understanding the expertise of reviewers. | |
| | Graduate Researcher , UW-Madison, WI, USA Prof. Theodoros Rekatsinas Sep 2017 - Dec 2018 <ul style="list-style-type: none">Proposed algorithms to perform error detection and correction for structured data using deep learning (DL).Approximate discovery of Functional Dependencies (FDs) using structure learningTested the accuracy of results against HoloClean for different noisy datasets. | |

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| PROFESSIONAL EXPERIENCE | Microsoft Research , Redmond, WA, USA <i>Research Intern</i> May 2020 - Aug 2020 |
| | Qualcomm , San Diego, CA, USA <i>Machine Learning Intern</i> June 2018 - Aug 2018 |
| | Intel Corporation , Bangalore, India <i>Design and Software Engineer (Infrastructure and performance modelling)</i> Jul 2012 - Jul 2017 |
| PAPERS AND CONFERENCES | <ol style="list-style-type: none"> 1. Meghana Moorthy Bhat, Saghar Hosseini, Ahmed Hassan Awadallah, Paul Bennett, Weisheng Li. "Detecting toxic language in conversations" (Under review - Title changed due to do double blind policy). 2. Meghana Moorthy Bhat, Srinivasan Parthasarathy. "How Effectively Can Machines Defend Against Machine-Generated Fake News? An Empirical Study." Workshop on Insights from Negative Results in NLP, EMNLP 2020. 3. Meghana Moorthy Bhat, Zhixuan Zhou "Fake News Detection via NLP methods becomes harder." Women in Machine Learning associated with NeurIPS 2019, Vancouver, BC, Canada (WiML). 4. Meghana Moorthy Bhat, Yogesh Chockalingam, Manjunath NS "DeepRepair: A framework for error detection and correction." Montreal AI Symposium 2019, Montreal, QC, Canada (MAIS). 5. Zhixuan Zhou, Huankang Guan, Meghana Bhat and Justin Hsu "Detecting Fake News with NLP: Challenges and Possible Directions." International Conference on Agents and Artificial Intelligence (ICAART) 2019. 6. Meghana Moorthy Bhat, Josef Eckmueller, Melwyn Scudder. "Performance Optimization of Virtual Prototypes." DTTC Intel, Portland, Oregon, USA 2015. (DTTC is Intel global internal conference) 7. Meghana Moorthy Bhat, Melwyn Scudder, Kartik Shah. "Virtual Prototype (VP) Quality Improvement Methodology." DvCon India, Bangalore, India, 2015. |
| PROJECTS | Stance-based summarization of debates. <i>Ohio State University</i> Generating extractive summary of debates from online forums. Sep 2020 - Present |
| | Snapdragon Neural Processor Engine (SNPE) <i>Qualcomm</i> (Adviser: Mark Charlebois) Worked on enabling 8-bit CPU (Fixed point math) in SNPE for better performance in overall speed-up and lesser memory consumption for SNPE AI powered phones. June 2018 - Aug 2018 |
| | Entity Matching using Machine Learning and Deep Learning <i>UW-Madison</i> (Course: Data Science, with Prof. AnHai Doan) Performed entity matching of books from raw data of Amazon and GoodReads using Magellan and DeepMatcher . Performed benchmark analysis of both the approaches to understand the respective trade-offs. Code Feb 2018 - Apr 2018 |
| TEACHING EXPERIENCE | Ohio State University , Columbus, OH, USA <i>Graduate Teaching Assistant</i> Aug 2019 - Dec 2019 |
| | University of Wisconsin-Madison , Madison, WI, USA <i>Graduate Teaching Assistant</i> Jan 2018 - May 2019 |

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| TECHNICAL SKILLS | Scientific Computing - Python (numpy, pandas, nltk, spaCy, sklearn, PyTorch, TensorFlow, Keras) General-purpose Programming & Others - Java, C++, SQL | |
| COURSEWORK | UW Madison CS 839 Data Management for Machine Learning Applications CS 839 Topics in Security CS 838 Data Science: Principles, Algorithms, Applications CS 760 Machine Learning CS 765 Data Visualization | SJCE Mysore Databases and Management Systems Algorithms and Data Structures Operating Systems Introduction to Networks |
| HONOURS AND ACHIEVEMENTS | NSF Student Travel Grant to attend WiML co-located with NeurIPS 2019. Student Travel Award to attend NeurIPS 2019. Qualcomm Hackathon Finalist - Award for Innovation, 2018. Application development award from US Ignite for SAFER Home project. Department Recognition Award, Intel Corporation for successful critical project completion, 2015. Employee Recognition Award, Intel Corporation for acceptance of poster presentation in DvCon India, 2015. Conferral of the Honours degree in CSE, SJCE Mysore, 2012 (Requires minimum of 8.5 CGPA throughout the last two years of undergraduate studies). State Board Merit Scholarship, Karnataka Secondary Education Examination Board (KSEEB) India, for 4 years of undergraduate study covering 75% of undergraduate tuition fee, 2008-2012. Ranked All India 780 out of 400,000 candidates in Common Entrance Test, 2008. | |
| EXTRACURRICULAR ACTIVITIES | Carnatic classical vocalist - Performed over 300+ concerts across India and USA. Audio WiML Workshop (2019) volunteer. Volunteered for Linux Club and SJCE music club during undergraduate studies to organize tech talks and events. | |