Bhargavi Paranjape

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EDUCATION

2019- University of Washington, Paul G. Allen School

Doctor of Philosophy

2017-2019 | Carnegie Mellon University, Language Technologies Institute

Master of Science in Language Technologies

Coursework: Introduction to Machine Learning (PhD-level), Algorithms for NLP, Advanced Multimodal Machine Learning, Deep Reinforcement Learning, Neural Networks for NLP, Graduate Seminar on Dialogue Systems

GPA: 4.12/4.33

2012-2016 Indian Institute of Technology, Kharagpur, India

Bachelor of Technology in Computer Science & Engineering

Coursework: Information Retrieval, Artificial Intelligence, Social Computing, Randomized & Approximation Algorithms, Distributed Computing, Machine Learning, Natural Language Processing

CGPA: 9.54/10; **Rank:** 4/70

RESEARCH EXPERIENCE

Sep'18 - Present | Graduate Research Assistant, Language Technologies Institute, Carnegie Mellon University Advisor: Prof. Graham Neubiq

- Neural models for multimodal multi-party dialogue analysis I work on unsupervised pretraining for utterance representations in domains with little training data
- Transfer Learning : Adapting dialogue act recognition models to new domains with related dialogue act ontologies

Aug'18 - Present

Independent Study, Language Technologies Institute, Carnegie Mellon University Advisor: Prof. Zachary Lipton

- Robustness and Interpretability for neural reading comprehension models: I work on improving robustness of reading comprehension models to adversarially inserted distractor sentences

Aug'17 - Aug'18

Graduate Research Assistant, Language Technologies Institute, Carnegie Mellon University Advisor: Prof. Justine Cassell

- Dialogue management for open-ended discussion : Association rule mining over dialogue acts to build a Bayes probabilistic dialogue policy
- Natural Language Generation of age-appropriate arguments, hypotheses & questions using shallow dialogue history parsing and a retrofitted word vector space

July'16 - Aug'17

Research, Fellow, Microsoft Research, Bangalore, India

- Advisors: Dr. Raghavendra Uduapa, Dr. Prateek Jain
- Structured Learning for pseudo-relevance feedback based query expansion in information retrieval
- Task-specific short document expansion using task-agnostic language features
- Resource optimized Machine Learning for Internet of Things(IoT)

SELECTED PUBLICATIONS

- 1. Aditi Chaudhary, Bhargavi Paranjape, Michiel De Jong Weighted Global Normalization for Multiple Choice Reading Comprehension over Long Documents, arXiv
- Bhargavi Paranjape, Yubin Ge, Zhen Bai, Jessica Hammer, Justine Cassell
 Towards Automatic Generation of Peer-targeted Science Talk in Curiosity-evoking Virtual Agent 18th ACM International Conference on Intelligent Virtual Agents(IVA 2018)
- 3. Bhargavi Paranjape, Zhen Bai, Justine Cassell

 Predicting the Temporal and Social Dynamics of Curiosity in Small Group Learning
 18th International Conference on Artificial Intelligence in Education(AIED 2018)
- 4. Vivek Gupta, Dheeraj Mekala, Bhargavi Paranjape, Harish Karnick "SCDV: Sparse Composite Document Vectors using soft clustering over distributional representations" Conference on Empirical Methods in Natural Language Processing (EMNLP 2017)

- 5. Chirag Gupta, Arun Sai Suggala, Ankit Goyal, Bhargavi Paranjape, Manik Varma, Prateek Jain "ProtoNN: Compressed and Accurate kNN for Resource-scarce Devices"

 International Conference on Machine Learning (ICML 2017)
- 6. Abhijnan Chakraborty, Bhargavi Paranjape, Sourya Kakarla, Niloy Ganguly "Stop Clickbait: Detecting and Preventing Clickbaits in Online News Media" Advances in Social Networks Analysis and Mining (ASONAM 2016) Nominated for Best Paper and awarded Best Student Paper

Internships

May'14 - July'14

May'15 - July'15 | Summer Internship, Microsoft India Development Center

Cloud & Enterprise Division

Extended the Service Level Agreement (SLA) feature of Microsoft Dynamics CRM 2015 Software

Summer Internship, Indian Institute of Technology, Bombay

Data Acquisition System, Project Ekalavya

Advisor: Prof. D. B. Phatak

Developed an affordable plug-n-play Sensor Data Acquisition System (DAQ) for science laboratories

in public schools and colleges in India