

# Prakhar Ojha

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CONTACT INFORMATION	Siebel Center 2113A Dept. of Computer Science University of Illinois at Urbana-Champaign	Ph: +1-412-251-2230 email: <a href="mailto:pojha2@illinois.edu">pojha2@illinois.edu</a> webpage: <a href="http://prakhar4.github.io">prakhar4.github.io</a>
RESEARCH INTEREST	Statistical relational learning, probabilistic inference over graphs, large-scale Knowledge Graphs, intersection of crowdsourcing with machine learning. <i>Current focus:</i> Crowdsourcing for knowledge evaluation.	
EDUCATION	Ph.D. <i>Computer Science</i> <b>University of Illinois at Urbana-Champaign</b> <ul style="list-style-type: none"><li>• <i>Research Group:</i> Data and Information Systems (DAIS)</li></ul> Master of Science (Research), <i>Computer Science &amp; Automation</i> <b>Indian Institute of Science</b> <ul style="list-style-type: none"><li>• <i>Thesis:</i> Utilizing Worker Groups And Task Dependencies In Crowdsourcing [pdf]</li><li>• <i>Mentor:</i> <a href="#">Dr. Partha Pratim Talukdar</a></li></ul> Bachelor of Technology, <i>Computer Science Engineering</i> <b>National Institute of Technology Karnataka</b> , Surathkal <ul style="list-style-type: none"><li>• <i>Thesis:</i> Learning Time-slice Parameter in Schedulers for Adaptive Preemption</li><li>• <i>Mentor:</i> <a href="#">Prof. Vani M</a></li></ul>	Aug'17 – present Aug'14 – Dec'16 Aug'10 – May'14
RESEARCH EXPERIENCE	<b>Carnegie Mellon University</b> , Pittsburgh, USA <i>Research Assistant</i> <ul style="list-style-type: none"><li>• <i>Focus:</i> Scaling Approximate Inference, Approximation-Aware Learning</li><li>• <i>Mentor:</i> <a href="#">Dr. Wolfgang Gatterbauer</a></li></ul> <b>Indian Institute of Science</b> , Bangalore, India <i>Graduate Research Student</i> <ul style="list-style-type: none"><li>• <i>Focus:</i> Knowledge Graph Evaluation, Inference Schemes, Crowdsourcing</li><li>• <i>Mentor:</i> <a href="#">Dr. Partha Pratim Talukdar</a></li></ul>	Jan'17 – Jun'17 Oct'14 – Nov'16
PUBLICATIONS	P. Ojha, P. Talukdar, <b>KGEval: Estimating Knowledge Graph Accuracy under Budget</b> <i>Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP-2017), Copenhagen, Denmark.</i> [pdf] P. Ojha, P. Talukdar, <b>Quality Estimation of Workers in Collaborative Tasks Using Group-Tests.</b> <i>Fourth AAAI Conference on Human Computation and Crowdsourcing (HCOMP-2016), Austin, TX.</i> [pdf] P. Ojha, S.Thota, M. Vani, M. Tahilliani. <b>Learning Scheduler Parameters for Adaptive Preemption.</b> <i>International Conference on Advanced Information Technologies and Applications (ICAITA-15), Dubai.</i> [pdf] P. Ojha, S.Thota, M. Vani, M. Tahilliani. <b>Temporally Extended Actions for Reinforcement Learning based Schedulers.</b> <i>International Journal of Soft Computing and Artificial Intelligence.</i>	

TALKS	<ul style="list-style-type: none"> <li>• Nov 2016: Databases (DB) seminar series, SCS, CMU</li> <li>• Nov 2016: Business Technology (BT) seminar series, Tepper, CMU</li> <li>• Nov 2016: AAAI Conference HCOMP-2016, Austin, TX</li> <li>• Oct 2016: Department Colloquium series, Computer Science &amp; Automation, IISc</li> <li>• Jul 2016: Undergraduate Summer School, CSA, IISc</li> </ul>
SELECTED PROJECTS	<p><b>Regret Minimization for Knowledge Graph Evaluation</b> Jan'16 – present Estimate knowledge graph's accuracy using online-learning and multi-arm-bandits framework to minimize budget regret.</p> <p><b>Allen AI Science Challenge</b> Nov'15 – Dec'15 Built an automated answering system for 8<sup>th</sup>-grade multiple choice science questions. Our team stood 10<sup>th</sup> among 170 teams globally. I worked on inference over knowledge graphs.</p> <p><b>Temporally Extended Actions in Reinforcement Learning</b> Jan'14 – May'14 Identified 'bottleneck' states in state-space of reinforcement learning agents and further abstracted low-level actions into single <i>Option</i>.</p>
INTERNSHIPS	<p><b>AES Trading Algorithms</b> Industrial Internship'13 <i>Mentor:</i> Munish Goyal, Assistant Vice President <b>Credit Suisse</b> As a part of AES algorithmic trading team, analyzed automated interventions by intelligent softwares in stock market.</p> <p><b>Intelligent Tutoring Agent</b> Winter Internship'12 <i>Mentor:</i> Prof. Carolyn P Rose, Carnegie Mellon Univ. <b>IPTSE</b> Modeled an agent to identify effectiveness of tutorial sessions in virtual learning platforms. Won the Best research project award.</p>
HONORS AND AWARDS	<ul style="list-style-type: none"> <li>• <b>Best poster</b> award at I-CARE 2016, IBM-Research India.</li> <li>• Microsoft Research Travel Grant for attending HCOMP-16.</li> <li>• <b>Best poster</b> award at Electrical Division Symposium - 2016, IISc.</li> <li>• Selected for Indo-French Summer Camp on Applied Mathematics 2015.</li> <li>• All India Rank in top 0.2% of 150K students in <b>GATE</b>'14.</li> <li>• Best project award at <i>IPTSE-2013</i> organized by CMU.</li> <li>• Selected for All India Maths Olympiad Camp'09 and qualified Indian National Math Olympiad (<b>INMO</b>'09).</li> <li>• 22<sup>nd</sup> rank at National Junior Maths Olympiad (<b>JMO</b>'08).</li> </ul>
KNOWLEDGE AND SKILLS	<ul style="list-style-type: none"> <li>• <b>Graduate Level Courses @ IISc:</b> Machine Learning, Foundations of Data Science, Probability and Statistics, Computational Methods of Optimization, Linear Algebra.</li> <li>• Programming: C, C++, C# .Net, Python, Bash</li> <li>• Software Packages: MATLAB, Weka, GIT, L<sup>A</sup>T<sub>E</sub>X, Windows Forms GUI</li> <li>• Human Languages: English, Hindi, Tamil</li> </ul>