

# Utkarsh Upadhyay

## Ph.D. candidate at MPI-SWS

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### Education

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Jan '15 – present	2 <sup>nd</sup> year Ph.D. Candidate at MPI-SWS, supervised by Dr. Manuel Gomez Rodriguez
Sept '09 – Feb '12	M.S. in Computer Science at EPFL, Switzerland, GPA: <b>5.7/6</b>
Aug '05 – May '09	B.Tech. in Electrical Eng. at Indian Institute of Technology, Kanpur; CPI: <b>9.5/10</b>

### Research Interest

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Developing large scale data-driven models and methods for understanding, predicting and improving the creation, consumption and dissemination of information and knowledge on real-world networks

### Work

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May '15 – present	Technical advisor for <a href="http://SpeaQWith.Me">SpeaQWith.Me</a> in Saarbrücken, Germany
Apr '12 – Dec '14	Data analytics, visualisation and web-client developer at Better AG, Zürich, Switzerland
Aug '10 – Feb '11	Internship at CCIL-NEC, Japan on <i>Information diffusion on Twitter</i>
May '08 – July '08	Internship at Microsoft Research, Redmond on <i>RoboCopy</i> replacement, <i>RoboClone</i>

### Academic Honors

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2016	Travel award for attending KDD '16
2012	Awarded <i>Prix ECLA Informatique</i> for highest GPA in Computer Science MS at EPFL
2009-10	Awarded the Academic Excellence scholarship for studying at EPFL
2009	Silver medal at the programming competition ACM-SWERC '09
2005-09	Recipient of the Aditya Birla Scholarship (Given to 10 students all over India)
2005-06	Recipient of the Academic Excellence Award at IITK
2005	Secured 108 <sup>th</sup> rank in Joint Entrance Examination for IITs (Percentile: 99.97%)

### Publications

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- **U. Upadhyay**, I. Valera, M. Gomez-Rodriguez. *Uncovering the Dynamics of Crowdlearning and the Value of Knowledge*. ACM International Conference on Web Search and Data Mining (WSDM) 2017
- A. Zarezade, **U. Upadhyay**, H. Rabiee, M. Gomez-Rodriguez. *RedQueen: An Online Algorithm for Smart Broadcasting in Social Networks*. ACM International Conference on Web Search and Data Mining (WSDM) 2017
- S. L. Blond, C. Gilbert, **U. Upadhyay**, M. Gomez-Rodriguez, D. Choffnes. *A Broad View of the Ecosystem of Socially Engineered Exploit Documents*. Network and Distributed System Security symp. (NDSS) 2017
- **U. Upadhyay**, I. Valera, M. Gomez-Rodriguez. *On Crowdlearning: How do People Learn in the Wild?* Workshop on Machine Learning for Education in Conference on Neural Information Processing Systems (NIPS) 2016
- N. Du, H. Dai, R. Trivedi, **U. Upadhyay**, M. Gomez-Rodriguez, L. Song. *Recurrent Temporal Point Processes: Embedding Event History to Vector*, ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2016

- R. Khalili, N. Gast, M. Popovic, **U. Upadhyay**, J.-Y. Le Boudec. *MPTCP is not Pareto-optimal: Performance issues and a possible solution*. **Best Paper Award**, ACM SIGCOMM International Conference on emerging Networking Experiments and Technologies (CoNEXT) 2012
- **U. Upadhyay**. *Reliable communication and control for the Smart Grid*, MS Thesis, EPFL 2012
- G. Mermoud, M. Mastrangeli, **U. Upadhyay**, A. Martinoli. *Real-Time Automated Modeling and Control of Self-Assembling Systems*. IEEE International Conference on Robotics and Automation (ICRA) 2012
- **U. Upadhyay**, N. Yoshinaga, S. Itaya, R. Tanaka, T. Konishi, S. Doi, K. Yamada, P. Davis. *Evaluation of Participants in Group-discussions on Twitter*. 8<sup>th</sup> Applications of Social Network Analysis (ASNA) 2011
- G. Mermoud, **U. Upadhyay**, W. C. Evans, A. Martinoli. *Top-Down vs Bottom-Up Model-Based Methodologies for Distributed Control: A Comparative Experimental Study*, International Symposium on Experimental Robotics (ISER) 2010
- R. Arora, **U. Upadhyay**, R. Tulshyan, K. Deb, J. Dutta. *A Parallel Randomized Algorithm for Solving Large Convex Minimax Problem*. Conference on Simulated Evolution and Learning (SEAL) 2010. Appears in LNCS, Springer, Vol. 6475

## Technical skills

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Programming	Typescript, Javascript, Python, R, C++, C, Java, Haskell, Ocaml
Other tools	Angular.js, D3.js, nginx, EC2, Meteor, gdb, SciPy, L <sup>A</sup> T <sub>E</sub> X, SCORM
Languages spoken	English (fluent), Hindi (native), German (beginner)

## Interests & activities

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- Prizes in puzzle solving and programming competitions:
  - Won Startup Weekend Saarbrücken in May '15 and co-founded [SpeaQWith.Me](#)
  - Silver medal at Swiss national *HC<sup>2</sup>* '10 programming competition at EPFL
  - Silver medal at ACM-SWERC '09 programming competition at Madrid, Spain
  - 2<sup>nd</sup> place twice in Chaos programming contest (Techkriti '06 and '07)
  - 2<sup>nd</sup> place in 99 word story writing competition in Alfaaz '08, the literary festival
  - 1<sup>st</sup> place in Electronic Circuit Design Competition, Techkriti '06
- Positions of responsibility held:
  - Program Committee for NIPS 2016
  - Co-organized Machine Learning Summer School 2016 in Cádiz, Spain
  - Coordinator of SciMaT<sub>E</sub>X, the pure science events, and TesseractT, the online puzzle solving competition in Techkriti (technical festival) '08
  - Secretary for Electronics club and English Literary Society events in Antragni (cultural festival) '07
  - A problem setter for International Online Programming Competition, conducted in Techkriti '08
- Teaching activity:
  - Taught a tutorial on Point Processes in Machine Learning Summer School 2016 in Cádiz, Spain
  - Teaching assistant for the seminar course on Social and Information Networks at TU-KL, 2016
- Reviewer for:
  - ACM International Conference on Web Search and Data Mining (WSDM) 2016, 2017
  - Conference on Neural Information Processing Systems (NIPS) 2015, 2016
  - International Joint Conference on Artificial Intelligence (IJCAI) 2016
  - ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2016
  - SIAM International conference on Data Mining (SDM) 2016
  - World Wide Web conference (WWW) 2016
  - Artificial Intelligence and Statistics conference (AISTATS) 2016
  - AAAI Conference on Artificial Intelligence 2016
  - Frontiers in Robotics and AI Journal, section Computational Intelligence, 2015
  - Conference for Information and Knowledge Management (CIKM) 2015