

Konstantina Christakopoulou | Curriculum Vitae

Department of Computer Science, University of Minnesota, 200 Union Street SE, Minneapolis, MN 55455

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Research areas: Machine learning, artificial intelligence, and their applications to recommendation systems.

EDUCATION

- **University of Minnesota, Twin Cities**
 - *Ph.D. Candidate in Computer Science. Anticipated 05/2018.* 09/2013–present
 - *Masters of Science, Computer Science* 05/2015
 - Thesis title: "Towards Recommendation Systems with Real-World Constraints"
 - Dissertation Committee: Arindam Banerjee, George Karypis, Vipin Kumar, Gedas Adomavicius
- **University of Patras, Greece**
 - *Diploma in Electrical Engineering & Computer Science* 09/2008–06/2013
 - Graduated first out of 230 students; GPA: 8.8/10
 - Ranked first student in admission (grade: 19.63/20)
 - Thesis advisor: George Moustakides; Thesis title: "Learning with Bayesian Networks"

ACADEMIC & INDUSTRY EXPERIENCE

- **University of Minnesota, Twin Cities, Computer Science Department** 09/2013–present
 - *Research Assistant*, advised by Professor Arindam Banerjee
 - My research focuses on developing novel machine learning models for recommendation systems, with an emphasis on ranking, conversational models and interactive learning techniques.
- **Google Research**, Mountain View, CA, USA 06/2017–08/2017
 - *Research Intern*, mentored by Ed H. Chi, Alex Beutel, Sagar Jain, Rui Li (1 publication)
 - Designed and implemented conversational models for YouTube.
- **Microsoft Research**, New England, MA, USA 06/2016–08/2016
 - *Research Intern*, mentored by Adam T. Kalai (1 publication)
 - Devised a novel machine learning framework for automatic writing of computer programs.
- **Microsoft Research**, Cambridge, UK 06/2015–08/2015
 - *Research Intern*, mentored by Filip Radlinski and Katja Hofmann (1 publication)
 - Proposed a conversational recommender and a set of preference elicitation strategies.
- **Google**, Dublin, Ireland 07/2012–12/2012
 - *Enterprise Sales Engineer Intern*, mentored by Matthieu Mayran
 - Implemented an automatic document categorization tool for Google Drive. Engineered automation tools for Google Enterprise workflows.

HONORS & AWARDS

- **Nominee for UMN Doctoral Dissertation Fellowship** 2017
- **Technical Chamber of Greece Honorary Award** for academic excellence in ECE Patras 2017
- **Finalist for Microsoft Research PhD Fellowship** selected across PhD students at US & Canada 2016
- **Gerondelis Scholarship** 2016–2017
- **College of Science & Engineering Graduate Fellowship** (Only 3 were awarded.) 2013–2014, 2014–2015

Award of academic excellence by the LIMMAT foundation of Zurich	2014
Prof. Miliadis award for highest ranking in University of Patras graduation	2013
I.K.Y. Foundation of Greek State Scholarships for being in the 1% of the University class	2008, 2009, 2012, 2013
Eurobank Award for highest ranking admission to University	2008
General Secretariat for Youth London Educational Journey: Selected among the best students in Achaea, Greece with the highest grade (20/20)	2007
Conference Travel Awards.....	
SIAM Student Travel Award	05/2018
Travel Scholarship for AAAI	02/2018
NSF Travel Grant & SIGIR Student Travel Grant for CIKM	11/2017
Travel Grant for KDD	08/2016
Google Student Grant for WWW	05/2015
WiML Travel Award	2015, 2016, 2017

REFEREED CONFERENCE PUBLICATIONS

8. **Adversarial Recommendation**
K. Christakopoulou and A. Banerjee. Under Preparation, 2018.
7. **Q&R: A Two-Stage Approach toward Interactive Recommendation**
K. Christakopoulou, A. Beutel, R. Li, S. Jain, E. Chi. International Conference on Knowledge Discovery and Data Mining (**KDD**), 2018, Applied Data Science Track.
6. **Learning to Interact with Users: A Collaborative-Bandit Approach**
K. Christakopoulou and A. Banerjee. SIAM International Conference on Data Mining (**SDM**), 2018.
5. **Glass-Box Program Synthesis: A Machine Learning Approach**
K. Christakopoulou and A. T. Kalai. AAAI Conference on Artificial Intelligence (**AAAI**), 2018.
4. **Recommendation with Capacity Constraints**
K. Christakopoulou, J. Kawale, and A. Banerjee. International Conference on Information and Knowledge Management (**CIKM**), 2017.
3. **Towards Conversational Recommender Systems**
K. Christakopoulou, F. Radlinski, and K. Hofmann. International Conference on Knowledge Discovery and Data Mining (**KDD**), 2016. [Taught in graduate courses \(Illinois University at Department of Computer Science, "Text Mining Seminar CS 591txt Fall 2016" AND BRAIN York University Data Mining Seminar 2016\).](#)
2. **Collaborative Ranking with a Push at the Top**
K. Christakopoulou and A. Banerjee. International World Wide Web Conference (**WWW**), 2015.
1. **Accelerated Alternating Direction Method of Multipliers**
M. Kadkhodaie, K. Christakopoulou, M. Sanjabi, and A. Banerjee. International Conference on Knowledge Discovery and Data Mining (**KDD**), 2015.

INVITED TALKS

12. "Learning to Interact with Users: A Collaborative-Bandit Approach", SDM'18, San Diego 05/2018
11. "Glass-Box Program Synthesis: A Machine Learning Approach", AAAI'18, New Orleans 02/2018
10. "Recommendation with Capacity Constraints", CIKM'17, Singapore 11/2017

9. "Conversational Models in YouTube", Internship Presentation, Google Mountain View 08/2017
8. **Invited talk in the 3rd AI With The Best**, "Recommendation Under Constraints" 04/2017
7. "Towards Conversational Recommender Systems", SIR team in Google 03/2017
6. **Invited talk in the Women in Machine Learning (WiML) workshop**, Barcelona, Spain
Selected as 1 of the 5 contributed talks, "Towards Conversational Recommender Systems" 12/2016
5. "Towards Conversational Recommender Systems", GroupLens, UMN 11/2016
4. **Invited talk in the 2nd AI With The Best**, "Interactive Learning for Recommendation" 09/2016
3. "Towards Conversational Recommender Systems", KDD'16, San Francisco, USA 08/2016
2. "Collaborative Ranking with a Push at the Top", WWW'15, Florence, Italy 05/2015
1. "My Organizer: Label your Docs Fast", Enterprise Technical Conference, Google Zurich 11/2012
Rated top internship presentation.

TEACHING EXPERIENCE

- Guest Lecture, Introduction to Machine Learning** (UMN CSCI-5521) 03/2017
"Dimensionality Reduction"
- Guest Lecture, Artificial Intelligence II** (UMN CSCI-5512) 02/2016
"Approximate Inference: Stochastic"

POSTER PRESENTATIONS

- "Glass-Box Program Synthesis: A Machine Learning Approach", WiML, Long Beach, CA 12/2017
- "Recommendation with Capacity Constraints", CIKM Connect, Singapore 11/2017
- "Towards Conversational Recommender Systems", WiML, Barcelona, Spain 12/2016
- "Towards Conversational Recommender Systems", KDD'16, San Francisco, CA 08/2016
- "Collaborative Ranking with a Push at the Top", WiML, Montreal, Canada 12/2015
- "Collaborative Ranking with a Push at the Top", UMN CS Open House 10/2015

SERVICE

- Program committee member:.....
- o **WWW 2018, Poster Session**
 - o **WWW 2016, Content Analysis Track**
- Reviewer:.....
- o **WiML 2017, WiML2017, NIPS 2015, IEEE TKDE**
 - o Reviewed papers for: ICML 2017, KDD workshops 2016, ICML 2015, ICDM 2014, AISTATS 2014
- Mentoring:.....
- o Hosted **1-1 Mentoring Sessions for AI With The Best** 09/2016, 04/2017
 - o Mentor for **CS Women Event**, UMN 10/2016
- Internal Service:.....
- o Co-organized internal workshop on "Deep Reinforcement Learning" 11/2016
- Volunteering:.....
- o Volunteer for KDD 2016
 - o Volunteer team for the organization of the 4th Greek Student Conference of Electrical & Computer Engineering (SFHMMY) 2010

PROFESSIONAL MEMBERSHIPS

- o Association for the Advancement of Artificial Intelligence (AAAI) 2017–2018
- o Association of Computing Machinery (ACM) 2016–2018

REFERENCES

Arindam Banerjee, Professor, Computer Science, University of Minnesota, Twin Cities
George Karypis, Professor, Computer Science, University of Minnesota, Twin Cities
Adam Tauman Kalai, Principal Researcher, Microsoft Research
Alex Beutel, Senior Research Scientist, Google Research