

George Brova

CONTACT INFORMATION	Siebel Center for Computer Science 201 North Goodwin Avenue Urbana, IL 61801, USA	Phone: +1-617-383-9607 E-mail: brova2@illinois.edu WWW: web.engr.illinois.edu/~brova2
OBJECTIVE	Seeking a full-time software engineering position with emphasis on data mining and machine learning.	
TECHNICAL SKILLS	<ul style="list-style-type: none">• Languages: Java, C, C++, Matlab, Python, MySQL, DB2, PHP, JavaScript, Haskell• Large data frameworks: Hadoop, Flume• Operating Systems: Linux, Mac OS X, Windows• Interests: Data Mining, Machine Learning, Heterogeneous Information Networks, Graph Theory, Artificial Intelligence.	
EDUCATION	University of Illinois at Urbana-Champaign , Urbana, IL Ph.D. in Computer Science Area of study: Data Mining Advisor: Prof. Jiawei Han	Sep. 2012 - May 2017
	Boston University , Boston, MA B.A./M.A. in Computer Science, <i>Summa Cum Laude</i> . GPA: 3.95/4.00 in Computer Science, 3.85/4.00 overall Trustee Scholar (recipient of a merit-based, four-year, full tuition scholarship)	Sep. 2008 - May 2012
INDUSTRY EXPERIENCE	Software Engineering Intern , Google <ul style="list-style-type: none">• Built and evaluated a classification system to help solve a (non-public) internal task.• The application required high interpretability. The models generated by my framework are more interpretable than all baselines, without a loss in performance.	May. 2014 – Aug. 2014
	Software Engineering Intern , American Express <ul style="list-style-type: none">• Explored strategies for recommending merchants to cardholders.• Ongoing work on recommending merchants away from a user's home city	Jun. 2013 – Aug. 2013
	Software Engineering Intern , Groupon <ul style="list-style-type: none">• Improved the algorithm that personalizes deal recommendations for users by using a more accurate estimate for the price of each deal.• Ran an A/B test validating the new method. Observed a 3.3% increase in revenue, with high statistical confidence.• Wrote new code for the recommendation engine in Java, and analysis tools in Hadoop.	Jun. 2012 – Aug. 2012
	Financial Software Developer Intern , Bloomberg L.P. <ul style="list-style-type: none">• Redesigned the Fair Value Detail function on the Bloomberg terminal, which computes and compares the fair values of futures contracts.• This function is used by financial professionals over 2,000 times daily.• Wrote the backend functionality in C++ and the user interface in Javascript.	May 2011 – Aug. 2011
	Financial Software Developer Intern , Bloomberg L.P. <ul style="list-style-type: none">• Designed and built an analysis tool for Bloomberg Tradebook's Pair Trading algorithm.	May 2010 – Aug. 2010

RESEARCH
EXPERIENCE

Research Assistant, University of Illinois Aug. 2012 – present

- Studying the spread of information in heterogeneous information networks.

Research Assistant (Authority Influence), Boston University Sep. 2010 – May 2011

- Defined a model to discern between and quantify the strength of influence exerted by peer and authority relationships in a social network, and applied the model to two real-world datasets to extract meaningful conclusions about the underlying social processes.

Research Assistant (Query by Humming), Boston University May 2009 – May 2010

- Designed and implemented an efficient and accurate query-by-humming system in C++

PUBLICATIONS

- Honglei Zhuang, Jing Zhang, **George Brova**, Jie Tang, Hasan Cam, Xifeng Yan, Jiawei Han: *“Mining Query-Based Subnetwork Outliers in Heterogeneous Information Networks”*, ICDM 2014.
- Huan Gui, Yizhou Sun, Jiawei Han, **George Brova**: *“Modeling Topic Diffusion in Multi-Relational Bibliographic Information Networks”*, CIKM 2014.
- Fangbo Tao, **George Brova**, Jiawei Han, Heng Ji, Chi Wang, Brandon Norick, Ahmed El-Kishky, Jialu Liu, Xiang Ren, Yizhou Sun: *“NewsNetExplorer: automatic construction and exploration of news information networks”*, SIGMOD Conference 2014.
- Fangbo Tao, Xiao Yu, Kin Hou Lei, **George Brova**, Xiao Cheng, Jiawei Han, Rucha Kanade, Yizhou Sun, Chi Wang, Lidan Wang, Tim Weninger: *“Research-insight: providing insight on research by publication network analysis”*, SIGMOD Conference 2013.
- Aris Anagnostopoulos, **George Brova**, Evimaria Terzi: *“Peer and authority pressure in information-propagation models”*, Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD) 2011.

TEACHING

- Teaching Assistant for CS411: Databases, Fall 2014
- Teaching Assistant for CS412: Data Mining, Fall 2013

HONORS AND
AWARDS

- Honorable mention, Computing Research Association Outstanding Undergraduate Researcher Award, a nationwide competition (2011)
- UROP Travel Award to present paper at the ECML-PKDD conference (2011)
- UROP funding for work on query-by-humming system (2009-2010)