

## Abolfazl Asudeh

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### EDUCATION

*Ph.D. Student*, Computer Science  
University of Texas at Arlington, 01/2012 - present  
advisors: Dr. Gautam Das  
GPA: 4.0/4.0

*Master of Science*, Computer Engineering-Software  
Sharif University of Technology, Tehran, Iran, 09/2006 - 10/2008  
advisor: Dr. Ali Movaghar  
Thesis: *Analysis and Improvement of Hierarchical Routing Protocols in WSNs*

*Bachelor of Science*, Computer Engineering-Software  
Sattari University, Tehran, Iran, Fall 09/2002 - 08/2006  
Thesis: *Analysis, Design and Implementation of a Communication Website: integrated Mail, News, File-sharing, and Chat*

### RESEARCH INTERESTS

(Big) Data Exploration and Hidden Databases  
Crowdsourcing and Human Computation  
(Knowledge) Graph Mining  
Network Algorithms, Wireless Sensor Networks

### PUBLICATIONS

- Abolfazl Asudeh, Gensheng Zhang, Naeemul Hassan, Chengkai Li, and Gergely V. Zruba, *Crowdsourcing Pareto-Optimal Object Finding by Pairwise Comparisons*, 24th ACM International Conference on Information and Knowledge Management (CIKM 2015), October 19 - 23, 2015, Melbourne, Australia, doi:10.1145/2806416.2806451.
- Abolfazl Asudeh, Gergely V. Zruba, and Sajal K. Das, *A general model for MAC protocol selection in wireless sensor networks*, Ad Hoc Networks Journal, volume 36 - part 1, pages 189 - 202, issn 1570-8705, Elsevier, 2016, doi:10.1016/j.adhoc.2015.07.005.
- Ning Yan, Abolfazl Asudeh, Chengkai Li, *Generating Preview Tables for Entity Graphs*, arXiv:1403.5006.
- Abolfazl Asudeh and Ali Movaghar, *MEHR: Multi-hop Energy-aware Hierarchical Routing for wireless sensor networks*, New Technologies Mobility and Security (NTMS'08), IEEE, 2008.
- Abolfazl Asudeh, Ali Shiralinia, and Mohammad Ghodsi, *Maximizing the Network Flow in Wireless Sensor Networks with Directed Antenna*, (in Persian) 13th CSI Computer Conference (CSICC'2008), Sharif University of Technology, March 9-11, 2008, Kish Island, Persian Gulf, Iran.

### AWARDS

- Enhanced Graduate Teaching Assistant fellowship (EGTA), University of Texas at Arlington, Jan. 2012 - Jan. 2015.
- STEM tuition fellowship, University of Texas at Arlington, Jan. 2012 - present.
- Kelcy Warren Graduate Fellowship Award, University of Texas at Arlington, Nov. 2015.
- CSE Department Scholarship, University of Texas at Arlington, Jan. 2015.

- Governmental Scholarships, 2002-2008 (B.Sc.: 4 years, M.Sc.: 2 years).

## RESEARCH PROJECTS

### *Hidden Databases*

- Structured hidden databases are pretty popular on the Web. Hidden Databases (such as Amazon, Yahoo, and Ebay) are the databases with the restrictive search interface that return a small portion of search results to the users. In this project we are dealing with information extraction from this kind of databases.

### *Crowdsourcing*

- We are working on the novel problem of finding skyline/top-k objects on multidimensional data using pairwise crowd questions.

### *Knowledge Graph Processing*

- *Preview Table for the knowledge graph*: we look for a set of tables (nodes in the graph) and attributes (edges) that summarizes a (complex) knowledge graph.

### *Wireless Sensor Networks*

- *A general Model for MAC protocol selection in sensor networks*: We introduce a scalable model for selecting a MAC protocol for WSNs based on requirements, application and the context.

## TEACHING EXPERIENCE

### *Teaching Assistant, The University of Texas at Arlington*

- CSE5301, Data Analysis and Modelling Techniques, Fall 2012, Fall 2013, Fall 2014.
- CSE1310, Introduction to Computers and Programming, Spring 2012, Summer 2013.
- CSE2320, Algorithms & Data Structures, Summer 2015.
- CSE5331/4331, Database 1, Summer 2012, Summer 2013.
- CSE1301, Computer Literacy, Fall 2012, Spring 2013, Fall 2013.

*Lecturer at Azad University, Payame Noor University, and University of Applied Science and Technology*: I have taught the following list of courses for at least one semester: Database 1, Principles of Algorithms, Computer Networks, OO Programming(C++), System Analysis and Design, Assembly Language, Principles of Network Security, Principles of Programming, Advanced Programming 1, Internet Engineering, Basics of C# Language, and Web Programming.

## INTERNSHIP

### *Internship at Microsoft, Summer 2014*

- Project: *Microsoft Pinpoint Telemetry*; Position: Developer; Company Branch: Commerce Platform - Seller Services.

## RELATED COURSES

*University of Texas at Arlington (Ph.D.)*: Data Modeling (CSE5301), Advanced Sensor Networks (CSE 6348), Security2 (CSE 5381), Data Mining (CSE5334), Multi-agent Systems (Game Theory) (CSE6369), Graph Data Mining (CSE 6339).

*Sharif University of Technology (M.Sc.)*: Network Modeling and Analysis, Advanced Algorithms, OS2, Data Mining, Software Engineering, DSS, OOSD Methodologies, Database2.

## SKILLS

*Programming Languages*: C++, C#, Assembly and a little about some other languages.

*Web Programming*: JavaScript, ASP.NET.

*Database*: SQL Server.

- REFERENCES**
- Dr. Gautam Das, <http://ranger.uta.edu/~gdas/>
  - Dr. Gergely Zruba, <http://crystal.uta.edu/~zaruba/>