# 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: inte-

grated 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

## PUBLICATI ONS

Abolfazl Asudeh, Gensheng Zhang, Naeemul Hassan, Chengkai Li, and Gergely V. Zruba, Crowdsourcing Pareto-Optimal Object Finding by Pairwise Comparisons, arXi v:1409.4 161.

Abolfazl Asudeh, Gergely V. Zruba, and Sajal K. Das, A Generic Model for MAC protocol selection in Sensor Networks, arXiv:1501.01657.

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, 2008, 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. 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.

## Crowdsouring

• 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 generic 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.
- 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

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

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

#### 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/