Seyed Amir Hosseini Beghaeiraveri

Semantic Web Labratory (SWeL)

School of Mathematical and Computer Sciences (MACS)

Heriot-Watt University

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Education

• Ph.D. - Heriot-Watt University, MACS

Edinburgh, UK 2020–present

Major: Computer Science, Semantic Web

Thesis Topic: Towards Automated Technologies in the Referencing Quality of Wikidata

Supervisors: Dr. Alasdair J G Gray, Dr. Fiona McNeill (co-supervisor)

Summary of Work: The study of the trustworthiness in Wikidata as one of the large and multi-topics open-source knowledge graphs is one of the existing gaps. The overall purpose of this Ph.D., is to evaluate and improve the quality of Wikidata references. There are some interesting questions like how has the increasing use of bots in Wikidata affected the quality of its references? How to effectively use new Relation Extraction technologies from texts to improve Wikidata referencing.

 \bullet M.Sc. - Sharif University of Technology (SUT), Computer Engineering Department

Tehran, Iran 2013–2015

Major: Algorithms and Computation

GPA: 17.35/20 (3.77/4)

Thesis Topic: Broadcast Efficient Verifiable Secret Sharing Supervisors: Dr. M. Izadi, Prof. M. Ghodsi (Internal Examiner)

• B.Sc. - Shahid Bahonar University of Kerman (SBUK), Computer Engineering Department

 $\begin{array}{c} \text{Kerman, Iran} \\ 2007 - 2012 \end{array}$

Major: Software Engineering GPA: 17.07/20 (3.7/4)

Project Topic: Installing Operating System on FPGA Chips

Supervisor: Dr. V. Sattari

• Diploma - Bagher-ol-Oloum Alavi High School

Major: Math & Physics, GPA: 19.30/20 (4/4)

Ravar, Iran 2004–2007

Research Experience

• Research at the Semantic Web Laboratory (SWeL) at Heriot-Watt University. Supervisor: Dr. Alasdair J G Gray.

Edinburgh, UK 2020–present

• Research and develop at research institutes of SUT.

Tehran, Iran 2015–2019

• Research Assistant at the Distributed Systems Laboratory (Disys Lab.) of SUT. Supervisor: Dr. M. Izadi.

Tehran, Iran 2013–2015

Publications

- Seyed Amir Hosseini Beghaeiraveri, Mohammad Izadi, and Mohsen Rezvani. "Broadcast Complexity and Adaptive Adversaries in Verifiable Secret Sharing" Security and Communication Networks 2020. 2020
- Seyed Amir Hosseini Beghaeiraveri, Alasdair Gray, and Fiona McNeill. "Experiences of Using WDumper to Create Topical Subsets from Wikidata" In 2nd International KGC workshop with ESWC 2020
- Seyed Amir Hosseini Beghaeiraveri, Alasdair Gray, and Fiona McNeill. "Reference Statistics in Wikidata Topical Subsets" In 2nd Wikidata Workshop with ISWC 2021
- Seyed Amir Hosseini Beghaeiraveri. "Towards Automated Technologies in the Referencing Quality of Wikidata" In Companion Proceedings of the Web Conference 2022

Teaching Experiences

Tutor:

- Interaction Design; Heriot-Watt University. (Fall 2022)
- Software Development, Computer Systems; Heriot-Watt University. (Summer 2022)

Lab Helper:

- Big Data Management; Heriot-Watt University; Dr. Alasdair Gray. (Spring 2021, Spring 2022)
- Databases and Information Systems; Heriot-Watt University; Dr. Alasdair Gray. (Fall 2020, Fall 2021)
- Hardware-Software Interface; Dr. Hans-Wolfgang Loidl. (Spring 2021)
- Advanced Network Security; Heriot-Watt University; Dr. Sasa Radomirovic. (Spring 2021)
- Introduction to Data Structures and Algorithms; Heriot-Watt University; Dr. Rob Stewart. (Fall 2021)
- Web Programming; Dr. Benjamin Kenwright. (Fall 2021)
- Database Management Systems; Heriot-Watt University; Supervisor: Dr. Alasdair Gray. (Spring 2021)

Teacher Assistant:

- Theory of Distributed Systems; Sharif University of Tech.; Dr. M. Izadi. (Spring 2015)
- Design of Object Oriented Systems; SBUK; Dr. A. Bahrololoum. (Spring and Fall 2011)
- Operating Systems Laboratory; SBUK; M.Sc. F. Afsari. (Spring 2012)

Lecturer:

• Foundations of Computer Science; Carpet Department of SBUK. (Fall 2012)

Talks & Seminars

- Creating, maintaining and updating Shape Expressions as EntitySchemas in the Wikimedia ecosystem SWAT4HCLS (Jan 2022)
- Biohackathon: report on reviewing Wikidata subsetting methods Wikidata Data Reuse Days (Mar 2022)
- Introduction to Entity Schemas and Shape Expressions Wikidata Data Quality Days (Jul 2022)

Awards & Honors

 James Watt Ph.D. Scholarship Award from the School of Mathematical and Computer Science, Heriot-Watt University

2012

- Top GPA among all the B.Sc. software engineering incoming students of SBUK. Kerman, Iran.
- Ranked 1st in the 8th Kerman laboratory physic Olympiad. Kerman, Iran. May 2007

Selected Experimental Projects

- Design and Development of the Referencing Quality Scoring System (RQSS).
- Design and Development of Content Management System (CMS) in ASP.Net & MSSQL Server.
- Design and Development of an Android App for charter-724 (Ticket reservation system).

Technical Skills

- Languages and Platforms: Advanced C/C++, Java, Python, .Net (C#, ASP, WPF, ADO, VB, XML, Silverlight), Database (SQL, MongoDB, PostgreSQL), Web (HTML, CSS, Javascript, React, Vue.js), Semantic Web(RDF, SPARQL, Neo4J, OWL), Cryptography, Assembly.
- Technical Softwares: Android Studio, MATLAB/Simulink, Jupiter, GCC, Visual Studio, MS Sql Management Studio, Proteos, Keil, Codevision, Bascom AVR, 80xx assembly compiler.
- Processors & Controller Devices: x64/x86, PowerPC, ARM 7, AVR.