

# Seyed Amir Hosseini Beghaeiraveri

Semantic Web Laboratory (SWeL)

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## Education

- **Ph.D.**, Heriot-Watt University, MACS Edinburgh, UK  
**Major:** Computer Science, Semantic Web 2020–present  
**Thesis Topic:** Towards Automated Technologies in the References Quality of Wikidata  
**Supervisor:** [Dr. Alasdair J G Gray](#)  
**Second Advisor:** [Dr. Fiona McNeill](#)  
**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 review 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.
- **M.Sc.**, Sharif University of Technology (SUT), Computer Engineering Department Tehran, Iran  
**Major:** Algorithms and Computation 2013–2015  
**GPA:** 17.35/20 (3.77/4)  
**Thesis Topic:** Broadcast Efficient Verifiable Secret Sharing  
**Supervisor:** [Dr. M. Izadi](#)  
**Second Advisor:** [Prof. M. Ghodsi](#)  
**Summary of Work:** In this case, we try to share confidential data as secret, between multiple nodes in a distributed system, in the presence of an active adversary that can destroy several nodes. The goal is that secret can be reconstructed with the participation of a certain size of honest nodes, with the minimum usage of rounds, messages, and broadcasts.  
**Selected Courseworks:** Theory of Distributed Systems(18.2/20), Randomized Algorithms(18.5/20), Algorithmic Game Theory(18.5/20), Theory of Computational Complexity(17.2/20), Massive Data Algorithms (18.6/20)
- **B.Sc.**, [Shahid Bahonar University of Kerman \(SBUK\)](#), Computer Engineering Department Kerman, Iran  
**Major:** Software Engineering 2007–2012  
**GPA:** 17.07/20 (3.7/4)  
**Thesis Topic:** Installing Operating System on FPGA Chips  
**Supervisor:** Dr. V. Sattari  
**Summary of Work:** In this project, we prepare and setup FPGA chips to install the GateOS operating system, which is used for the purposes of image processing and has a hardware implementation instead of software codes. Hardware implementation of the OS has clearly higher speed and we improve the performance of the OS with some hardware tricks.  
**Selected Courseworks:** Data Structures(20/20), Design of Object Oriented Systems(20/20), Logical Circuits(19/20), Digital Circuits Design(FPGA)(20/20), Assembly and machine language(20/20)
- **Diploma**, Bagher-ol-Oloum Alavi High School Ravar, Iran  
**Major:** Math & Physics, 2004–2007  
**GPA:** 19.30/20 (4/4)

## Awards & Honors

- James Watt Ph.D. Scholarship Award from the School of Mathematical and Computer Science, Heriot-Watt University Sep 2019
- Top GPA among all the B.Sc. software engineering incoming students of SBUK. Kerman, Iran. 2012
- Ranked 1st in the 8th Kerman laboratory physic Olympiad. Kerman, Iran. May 2007

## Research Experience

- Research at the Semantic Web Laboratory (SWeL) at Heriot-Watt University. Edinburgh, UK  
Supervisor: [Dr. Alasdair J G Gray](#). 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. Tehran, Iran  
Supervisor: [Dr. M. Izadi](#). 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

## Teaching Experiences

- Big Data Management Lab Helper; Heriot-Watt University; Supervisor: [Dr. Alasdair Gray](#). (Spring 2021)
- Database Management Systems Lab Helper; Heriot-Watt University; Supervisor: [Dr. Alasdair Gray](#). (Spring 2021)
- Databases and Information Systems Lab Helper; Heriot-Watt University; Supervisor: [Dr. Alasdair Gray](#). (Fall 2020)
- Theory of Distributed Systems TA; SUT; Supervisor: [Dr. M. Izadi](#). (Spring 2015)
- Design of Object Oriented Systems TA; SBUK; Supervisor: [Dr. A. Bahrololoum](#). (Spring and Fall 2011)
- Operating Systems Laboratory TA; SBUK; Supervisor: M.Sc. F. Afsari. (Spring 2012)
- Foundations of Computer Science; Carpet Department of SBUK. (Fall 2012)

## Selected Experimental Projects

- Design and Development of Content Management System (CMS) with ASP.Net & MSSQL Server.
- Design and Development of an Android App for charter-724 (Ticket reservation system).
- Design and Development of an Android App for Shouhaaz (Tourists service system).

## Language Proficiency

- Language skills: Persian (native), English (fluent).

## Technical Skills

- **Technical Softwares:** Android Studio, MATLAB/Simulink, Jupiter, GCC, Visual Studio, MS Sql Management Studio, Proteos, Keil, Codevision, Bascom AVR, 80xx assembly compiler.
- **Programming Languages:** Advanced Linux C/C++, Java, Python, .Net Framework (C#, ASP, WPF, ADO, VB, XML, Silverlight, Cryptography), Database (MySQL, SqlServer), HTML, PHP, CSS, Assembly.
- **Processors & Controller Devices:** x64/x86, PowerPC, ARM 7, AVR, PIC32/dsPIC/PIC.
- **Type Settings:**  $\text{\LaTeX}$ , Microsoft Office.

## Activities

- **Sports:** Professional Volleyball, Swimming.
- **Art:** Photography, the Calligraphy.