

# ALA ARMAN

## Education

- 02/2018      **PhD in Computer Science | Università degli Studi di Milano, Crema, Italy**  
Thesis Title: Supporting Users in Cloud Plan Selection  
Supervisor: Prof. Pierangela Samarati
- 03/2012      **MSc in Software Engineering of Distributed Systems | Royal Institute of Technology (KTH), Stockholm, Sweden**  
Thesis Title: Automated Control of Elasticity for a Cloud-Based Key-Value Store
- 02/2006      **BSc in Computer Engineering (Software Branch) | Azad University (Najaf-Abad Branch), Najaf-Abad, Iran**

## Research Experience

- 06/2018-06/2022      **Research Associate | DISIT Lab., Università degli Studi di Firenze, Florence, Italy**  
Designed and developed innovative IoT-based solutions, in the context of several regional and Europe-wide projects (e.g., HERIT-Data, MOSAiC), to support sustainability in Smart Cities
- 11/2014-02/2018      **Graduate Research Assistant | SPDP Lab., Università degli Studi di Milano, Crema, Italy**  
Provided models and tools to help users in outsourcing applications, considering their requirements, and in Cloud solution selection, taking into account their characteristics
- 02/2011-02/2012      **Graduate Research Assistant | School of Electrical Engineering and Computer Science, Royal Institute of Technology (KTH), Stockholm, Sweden**  
Investigated the feasibility of control-theoretic approaches to the automation of elasticity of Cloudbased storages by the development of a feedback controller for distributed key-value stores

## Industry Experience

- 09/2008-07/2009      **Software Engineer | SepanoDp Co., Isfahan, Iran**  
Elicited software requirements, provided design and implementation proposals, and collaborating with different involved parties to achieve suitable solutions
- 06/2005-02/2006      **System Analyst | Isfahan University of Technology, Isfahan, Iran**

Evaluating the work-flows of a health-care institute with the goal of identifying software and administrative issues for developing mitigating solutions

## Teaching Experience

Fall 2012, Spring  
2013

Undergraduate Lecturer | Azad University (Najaf-Abad Branch), Najaf-Abad, Iran

Courses: Programming Languages (Design & Implementation), Computer Simulation, Software Engineering, Software Engineering, Software Engineering Lab., Data Structure

## Publications

2022b

A. Arman, C. Badii, P. Bellini, P. Nesi, and M. Paolucci, "Analyzing Demand with Respect to Supply of Transportation", Manuscript Under Review

2022a

A. Arman, P. Bellini, and P. Nesi, "Seaching for Heterogeneous Geolocated Services via API Federation", Accepted in the Proc. of 22<sup>nd</sup> International Conference on Computational Science and Its

Applications (ICCSA 2022), Malaga, Spain, July 4–7, 2022

2021

A. Arman, P. Bellini, D. Bologna, P. Nesi, G. Pantaleo, and M. Paolucci, "Automating IoT Data Ingestion Enabling Visual Representation", in *Sensors*, vol. 21, no. 24, Art. no. 24, Jan. 2021, doi: 10.3390/s21248429.

2019

A. Arman, P. Bellini, M. Paolucci, and P. Nesi, "Analyzing Public Transportation Offer wrt Mobility Demand", in the Proc. of 1<sup>st</sup> ACM International Workshop on Technology Enablers and Innovative Applications for Smart Cities and Communities (TESCA 2019), New York, NY, USA, November 10, 2019

2018b

A. Arman, S. Foresti, G. Livraga, and P. Samarati, "Cloud plan selection under requirements of multiple applications", in *Security & Privacy*, vol. 1, n. 4, July/August 2018

2018a

A. Arman, Supporting Users in Cloud Plan Selection", PhD Thesis, Università degli Studi di Milano Milan, Italy, February 2018

2016

A. Arman, S. Foresti, G. Livraga, and P. Samarati., "A Consensus-based Approach for Selecting Cloud Plans", in the Proc. of 2<sup>nd</sup> International Forum on Research and Technologies for Society and Industry (RTSI 2016), Bologna, Italy, September 7–9, 2016

2012

A. Arman and A. Al-Shishtawy, and V. Vlassov., "Elasticity Controller for Cloud-Based Key-Value Stores", in the Proc. of 18<sup>th</sup> International Conference on Parallel and Distributed Systems (ICPADS 2012), Singapore, December 17–19, 2012

## Technical Skills

Programming Languages      Java(, php)

Query Languages	SQL, SPARQL, JPQL
Scripting/Markup Languages	HTML, CSS, JavaScript, JQuery, Node.js, Node-RED
Analytical Languages	R, MATLAB
Modelling Languages	UML
Databases	MySQL, Virtuoso, PostgreSQL, MS SQL, Voldemort
J2EE Technologies	RESTful, JDBC
Frameworks/APIs	Spring, Hibernate, JPA
Visualization Tools	Highcharts
IDEs/Tools	Eclipse, Netbeans, Visual Studio, MySQL Workbench, RStudio, Rational Rose
Operating Systems	Windows, Linux

## Language Skills

English | Fluent

Italian | Intermediate (A<sub>2</sub>)

## Scholarships

Research Scholarship | Università degli Studi di Firenze, Florence, Italy

06/2018-06/2022

05/2022-

06/2022

03/2021-

05/2021 12/2019-

Development Scholarship | Università degli Studi di Firenze, Florence, Italy

01/2020

12/2014-

12/2017

PhD Scholarship | Università degli Studi di Milano, Milan, Italy

## References

Available upon request

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