

Curriculum Vitae

PERSONAL DATA

Name: Maryam Ghorani

Citizenship: Iranian

Academic Rank: Assistant Professor

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EDUCATION

Ph.D. Mathematics (Theory of Languages and Automata), Alzahra University, Tehran, Iran, 2008-2012.

Thesis title: (L-valued) tree automat

Supervisor: Prof. M.M. Zahedi; Advisor: Prof. R. Ameri

M.Sc. Applied Mathematics (Theory of Languages and Automata), Alzahra University, Tehran, Iran, 2006-2008.

Thesis title: Topics in Turing machine

Supervisor: Prof. M.M. Zahedi; Advisor : Prof. M.H. Shafazand

B.Sc. Pure Mathematics, University of Sistan and Baluchestan, Zahedan, Iran, 2002-2006.

JOURNAL PAPERS

- 1- M. Ghorani, State hyperstructures of tree automata based on lattice-valued logic, *RAIRO-Theoretical Informatics and Applications*, (2018), <https://doi.org/10.1051/ita/2018004>.
- 2- M. Ghorani, Tree automata based on complete residuated lattice-valued logic: reduction algorithm and decision problems, *Iranian Journal of Fuzzy Systems*, In press (2017).
- 3- M. Ghorani, On characterization of fuzzy tree pushdown automata, *Soft Computing*, (2017), <https://doi.org/10.1007/s00500-017-2829-7>.
- 4- M. Ghorani, The equivalence between weighted top-down tree automata, *Journal of Knowledge-Based Engineering and Innovation*, 3 (2017) 782-788.
- 5- M. Ghorani, M.M. Zahedi, Alternating Regular Tree Grammars in the Framework of Lattice-Valued Logic, *Iranian Journal of Fuzzy Systems*, 13(2) (2016) 71-94.
- 6- M. Ghorani, M.M. Zahedi, Coding tree languages based on lattice-valued logic, *Soft Computing*, 21 (14) (2017) 3815-3825.
- 7- M. Ghorani, M.M. Zahedi, On characterization of complete residuated lattice valued tree automata, *Fuzzy Sets and Systems*, 199 (2012) 28-46.
- 8- M. Ghorani, M.M. Zahedi, R. Ameri: Algebraic properties of complete residuated lattice valued tree automata. *Soft Computing*, 16(10) (2012) 1723-1732.

Conference papers

- 1- M. Ghorani, Some results on fuzzy tree automata, 48th Annual Iranian Mathematics Conference, 2017/8/23, Hamedan, Iran
- 2- M. Ghorani, A pumping lemma for fuzzy tree language with a threshold, 2nd National Conference on Soft Computing, 2017/11/22, Guilan, Iran

- 3- M. Ghorani, Pushdown automata based on lattice-valued logic: clouser properties and decision problems, 2nd National Conference on Soft Computing, 2017/11/22, Guilan, Iran
- 4- M. Fathadi, M. Ghorani, Strength of fuzzy dominateon in fuzzy graphs, 2nd National Conference on Soft Computing, 2017/11/22, Guilan, Iran
- 5- M. Ghorani, The equivalence between weighted top-down tree automata, 3rd Conference on Electrical and Computer Engineering Technology, 2017/5/26, Tehran, Iran
- 6- M. Ghorani, M.M. Zahedi, On the connection of hypergroups and tree automata, The 44th Annual Iranian Mathematics Conference, August 27-30, 2013, Mashhad, Iran.

- 7- M. Ghorani, On characterization of alternating regular tree grammar, 5th Iranian Conference on Applied Mathematics, September 8-10, 2013, Hamedan, Iran.

- 8- M. Ghorani, Response function of lattice valued tree automata, 5th Iranian Conference on Applied Mathematics, September 8-10, 2013, Hamedan, Iran.

- 9- M. Ghorani, Tree automata and hypergroups, The 6th Mathematics Conference of Payame Noor University, March 5-6, 2014, Isfahan, Iran.

- 10- M. Ghorani, Direct product of hypergroups induced by tree automata, The 6th Mathematics Conference of Payame Noor University, March 5-6, 2014, Isfahan, Iran.

- 11- M. Ghorani, M.M. Zahedi, The behavior of fuzzy tree automata, Applied Mathematics Conference, March 20-21, 2010, Zahedan, Iran.

- 12- M. Ghorani, M.M. Zahedi, B.A. Ghaznavi-ghosoni, A pumping lemma for lattice-valued tree automata, 11th Iranian Conference on Fuzzy Systems, July 5-7, 2011, Zahedan, Iran.

- 13- M. Ghorani, M.M. Zahedi, R. Ameri, On properties of lattice valued tree automata, 11th Iranian Conference on Fuzzy Systems, July 5-7, 2011, Zahedan, Iran.

