Ali Gholami Rudi — Curriculum Vitae

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Research Interests Computational geometry; Parallel algorithms

Academic Positions	Assistant Professor, Department of Electrical and Computer Engineering, Babol Noshirvani University of Technology	*2015—*

Education	Tarbiat Modares University, Tehran PhD in Computer Engineering	*2011—2015*
	Tarbiat Modares University, Tehran MSc in Computer Engineering	*2008—2010*
	Sharif University of Technology, Tehran BSc in Computer Engineering	*2004—2008*

Honours and Awards	Gold Medal in 13th Iranian National Olympiad in Informatics	*2003*

Preprints and Publications

Approximate Curve-Restricted Simplification of Polygonal Curves. *Proceedings of the 2nd Iranian Conference on Computational Geometry*, 2019. arXiv:1811.04552 [cs.CG].

Approximate Discontinuous Trajectory Hotspots. *Proceedings of the 2nd Iranian Conference on Computational Geometry*, 2019. arXiv:1901.01763 [cs.CG].

Enumerating Collinear Points in Higher Dimensions. With R. A. Rufai. To appear in *Scientific Annals of Computer Science*, 2019.

Looking for Bird Nests: Identifying Stay Points with Bounded Gaps. *Proceedings of the 30th Canadian Conference on Computational Geometry*, 334–339, 2018. arXiv:1803.07773 [cs.CG].

Time-Windowed Contiguous Hotspot Queries. *Proceedings of the 1st Iranian Conference on Computational Geometry*, 15–18, 2018. arXiv:1711.03795 [cs.CG].

Approximate Hotspots of Orthogonal Trajectories. *Proceedings of the 1st Iranian Conference on Computational Geometry*, 37–40, 2018. arXiv:1710.05185 [cs.CG].

A Practical Algorithm for Enumerating Collinear Points. With R. A. Rufai. 2017. arXiv:1706.05412 [cs.CG].

An Improved Lower Bound for General Position Subset Selection. *Int. J. Computing Science and Mathematics* 8(6):562–569, 2017. arXiv:1702.08654 [cs.CG].

Image Preprocessing with a Parallel Optoelectronic Processor. With S. Jalili. *Computers & Electrical Engineering* 46:554–565, 2015.

RANGI: A Fast List-Colored Graph Motif Finding Algorithm. With S. Shahrivari, S. Jalili, Z. R. M. Kashani. *ACM/IEEE Transactions on Computational Biology and Bioinformatics* 10(2):504–513, 2013.

A Parallel Optical Implementation of Arithmetic Operations. With S. Jalili. *Optics & Laser Technology* 49:173–182, 2013.

A New Light-Based Solution to the Hamiltonian Path Problem. With J. S. Sartakhti, S. Jalili. *Future Generation Computer Systems* 29:520–527, 2013.

Patents   IROST Patent: Electro-optic Parallel Processor. With S. Jalili, R. R. Dehsorkh. Iranian Research Organization for Science and Technology, 2017.