## Ali Gholami Rudi — Curriculum Vitae

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Research Interests Computational geometry; Parallel algorithms

**Academic** 2015— Assistant Professor,

**Positions** Department of Electrical and Computer Engineering,

Babol Noshirvani University of Technology

Education Tarbiat Modares University, Tehran 2011-2015

PhD in Computer Engineering

Tarbiat Modares University, Tehran 2008-2010

MSc in Computer Engineering

Sharif University of Technology, Tehran 2004-2008

BSc in Computer Engineering

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

**Awards** 

**Preprints and** Approximate Curve-Restricted Simplification of Polygonal Curves. arXiv:1811.04552 [cs.CG]

**Publications** Proceedings of the 2nd Iranian Conference on Computational Geometry, 2019.

Approximate Discontinuous Trajectory Hotspots. arXiv:1901.01763 [cs.CG]

Proceedings of the 2nd Iranian Conference on Computational Geometry, 2019.

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. arXiv:1803.07773 [cs.CG]

Proceedings of the 30th Canadian Conference on Computational Geometry, 334–339, 2018.

Approximate Hotspots of Orthogonal Trajectories.

arXiv:1710.05185 [cs.CG]

To appear in Fundamenta Informaticae, 2019.

Proceedings of the 1st Iranian Conference on Computational Geometry, 37–40, 2018.

Time-Windowed Contiguous Hotspot Queries.

arXiv:1711.03795 [cs.CG]

Proceedings of the 1st Iranian Conference on Computational Geometry, 15–18, 2018.

An Improved Lower Bound for General Position Subset Selection. arXiv:1702.08654 [cs.CG]

*Int. J. Computing Science and Mathematics* 8(6):562–569, 2017.

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, and 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, and S. Jalili). *Future Generation Computer Systems* 29:520–527, 2013.

**Patents** 

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

DOI: 10.22104/IROST.1396.163