

Azadeh Tabatabaei

aztabatabaee@gmail.com

a.tabatabaei@usc.ac.ir

CURRENT POSITION

Faculty Member of University of Science and Culture, Tehran, Iran
Department of Computer Engineering, 2018-Present, Director of Master of Data Science Department.

EDUCATION

2016 PhD in Computer Engineering
Sharif University of Technology, Tehran, Iran
Supervised by Professor Mohammad Ghodsi
Dissertation: Path planning Algorithms for Simple Robot in
Unknown Environment

2010 MS in Computer Science - Intelligent System
Amirkabir University of Technology, Tehran, Iran
Dissertation: Watchman Route under Visibility Constraint

2008 BS in Mathematics and Computer Science
Al-Zahra University, Tehran, Iran

RESEARCH AND TEACHING INTERESTS

- Machine Learning
- Algorithms and Approximated and Randomized algorithm
- Graph Algorithms
- Time series (forecasting)
- Deep Learning
- Probabilistic Graphical Models

PUBLICATIONS

- ✓ Farzaneh Banar, Azadeh Tabatabaei, Mohammad Saleh, " Stream Data Classification with Hoeffding tree An Ensemble Learning Approach ." (ICWR 2023)
- ✓ Mohammad Gorji, Farhad Nasri and Azadeh Tabatabaei, "Transfer Learning Approach for Recognition of Iranian Traffic Signs in Self-Driving Cars." (ICWR 2022)
- ✓ Azadeh Tabatabaei, Mozghan Zandi Nezhad, "A Label Propagation Based Algorithm for Community Detection in Social Networks. " (ICWR 2022)
- ✓ Azadeh Tabatabaei, Farehe Soheil, Mohammad Aletaha and Mohammad Ghodsi. " Integer Cow-path Problem and Simple Robot Street Search." The 33th Canadian Conference on Computational Geometry (CCCG 2021)
- ✓ Azadeh Tabatabaei, Mohammad Aletaha, Fardin Shapouri and Mohammad Ghodsi, . " Watchman Routes under Incidence Visibility Constraint in Convex Polygons" (ICCG 2021)
- ✓ MohammadJavad Asadi, Azadeh Tabatabaei, "proposed Method for Reducing Bandwidth Utilization in Live Container Migration at Fog Layer" (ICWR 2020)
- ✓ Mohammad Movaghar, Azadeh Tabatabaei, Analysis Of Social Anomalies In The Area Of Security And Correct Resource Management Using Clustering Technique And Descriptive Statistics. 6th National Conference on Applied Research in Computer Engineering and Information Technology(2020)
- ✓ Azadeh Tabatabaei, Mohammad Aletaha and Mohammad Ghodsi, . "Competitive Strategies for Walking in Streets for a Simple Robot Using Local Information" (ICCG 2020)
- ✓ Azadeh Tabatabaei, Mohammad Ghodsi, and Fardin shapouri. "Competitive Strategy for Walking in Streets for an Empowered Simple Robot" (ICCG 2019)
- ✓ Azadeh Tabatabaei and Mohammad Ghodsi, and Fardin Shapouri. "A Competitive Strategy for Walking in Generalized Streets for a Simple Robot." The 28th Canadian Conference on Computational Geometry (CCCG 2016)
- ✓ Azadeh Tabatabaei and Mohammad Ghodsi. "Walking in Street with MinimalSensing." Journal of Combinatorial Optimization (2015)
- ✓ Mohammad Abouei Mehrizi, Mohammad Ghodsi and Azadeh Tabatabaei. "Multi Robots Cooperation for Finding Target in Street." In proceedings of TTCS 2015. Springer Lecture Notes in Computer Science (2015)

- ✓ Azadeh Tabatabaei, and Mohammad Ghodsi. "A Randomized Strategy for Walking in Streets for a Simple Robot." The 31th Annual European Workshop on Computational Geometry (EuroCG 2015), March 15-18, Ljubljana, Slovenia (2015)
- ✓ Azadeh Tabatabaei and Mohammad Ghodsi "Optimal Strategy for Walking in Streets with Minimum Number of Turns for a Simple Robot." Springer Lecture Notes in Computer Science (2014)
- ✓ Azadeh Tabatabaei and Mohammad Ghodsi "Walking in streets with minimal sensing." In Combinatorial optimization and applications, pp 361–372. Springer Lecture Notes in Computer Science (2013)
- ✓ Azadeh Tabatabaei and Ali mohades. "Clarity Watchman Route." in online Proceedings of 7th Japan Conference on Computational Geometry and Graphs (2009)

And Some Persian Papers...

TEACHING AND MENTORING EXPERIENCE

- Instructor for Undergraduate students, Design and analysis of algorithm, computational intelligence and Artificial intelligence, Science and culture university (2018 - present)
- Instructor for Master Student, advanced algorithm, machine learning and time series forecasting courses, Probabilistic Graphical Models, Science and culture university (2018 - present)
- Teaching Fellow, Design and analysis of algorithm, Sharif University of Technology (Fall 2013 and 2014)
- Thesis Advisor for three Sharif University undergraduates (2012-13 and 2014-15)
- lecturer for undergraduate, Mathematics and programing courses, Sharif University
- Instructor for Master Student, advanced algorithm and Computational Geometry courses, Azad university (2011-2014)

RELATED PROFESSIONAL EXPERIENCE

- Reviewer in IPL, IEICE, IJECE, and IJWR Journals
- Member of the program committee of the web research conference (ICWR 2019-2022)
- Reviewer of the papers of International Conference of Web Research, 2018 – present
- Reviewer of the papers of the annual conference of the Iranian Computer Society, 2011-2016
- Member of the Mathematical Society of Al-Zahra University
- Member of the theory and algorithm group of Sharif University of Technology
- The ACM Competition staff, Sharif university of Technology, 2013

Honors

- Graduated from Al-Zahra University, received the first rank
- Graduated from Amirkabir University of Technology, received Member the topping rank
- Ph.D. graduated from the best university in Iran, received 17.24 average

Skills

- Machine learning with Python
- Deep learning (Tensorflow, Keras, pytorch, BNlearn)
- Programming with c and c ++ and using openGl
- Parallel processing with Cuda
- Computer Vision tasks: image classification, object detection/recognition/segmentation, CNNs, R-CNNs, GANs, vision

transformers, transfer learning using pre-trained models like VGG, MobileNet, Inception, ResNet.

- Data Science tasks: Data acquiring, cleaning, exploring, visualizing, building predictive models.
- Optimization algorithms: PSO, Genetic, ACO, NSGA, SPEA
- Web page designing (Front End Developer): HTML, CSS, JAVASCRIPT

REFERENCES

Mohammad Ghodsi
Professor of Computer
Engineering Department
Sharif University of Technology,
Tehran Iran
Phone: +982166166625
E-Mail: ghodsi@sharif.edu

Mohammad Ali Abam
Assistant Professor of Computer
Engineering Department
Sharif University of Technology,
Tehran Iran
Phone: +982166166653
E-Mail: abam@sharif.edu