



امیر امین زاده قوی فکر

استادیار

دانشکده: مهندسی برق و کامپیوتر



### سوابق تحصیلی

مقطع تحصیلی	سال اخذ مدرک	رشته و گرایش تحصیلی	دانشگاه
کارشناسی	۱۳۸۸	مهندسی برق-کنترل(هیپتیک و حس لامسه انسان و کامپیوتر)	دانشگاه تبریز
کارشناسی ارشد	۱۳۹۱	مهندسی برق-کنترل(ربات های جراحی از راه دور)	دانشگاه تبریز
دکتری	۱۳۹۷	مهندسی برق-کنترل(سیستم های کنترل از راه دور چندنرخی)	تبریز-ورونا

### سوابق اجرایی

Chair of IEEE Young Professionals committee of Iran Section

Member of Membership development Committee of IEEE Iran Section

Member of Student Activities Committee of IEEE Iran Section

Advisor of Talented Students of Marand Technical Faculty-University of Tabriz-2020

(Chair of IEEE Student Section at University of Tabriz (2015-2017

Member of Technology, Innovation and Entrepreneurship Committee- Marand Technical Faculty- University of Tabriz-2020

Executive Publication chair of the Forth International Congress on Electric Industry Automation-2015

Executive Coordination chair of the first National Conference on Novel Achievements on Electrical Engineering in Mines and Mineral Industry-2017

International Relations Chair of 28<sup>th</sup> Iranian Conference on Electrical Engineering (ICEE 2020)-2020

Informatics and International relation chairs of the 7<sup>th</sup> international conference on Control, Instrumentation and Automation (ICCIA 2020)-2020

Executive Committee Chair of 12th Annual Power Electronics, Drive Systems, and Technologies Conference (PEDSTC2021)-2021

International Relations Chair of 11th Smart Grid Conference (SGC).2021

International relation chairs of the 8<sup>th</sup> international conference on Control, Instrumentation and Automation (ICCIA 2021)-2021

IEEE affairs chair of the 4<sup>th</sup> West Asian Symposium on Optical and Millimeter-wave Wireless (Communications (WASOWC2022

Executive Committee Chair of 12th Annual Power Electronics, Drive Systems, and Technologies Conference (PEDSTC2021)-2021

International Relation Chair of 9th International Conference on Technology and energy Management ((ICTEM2023

Executive Committee Chair of 10th International Conference on Technology and energy Management ((ICTEM2024

## جوایز و تقدیر نامه ها

انتخاب به عنوان استاد سرآمد آموزشی دانشگاه تبریز-اردیبهشت 1403

Ranked among the top 1 percent of all the examinees in the Iranian nationwide entrance exam of universities for undergraduate studies	2005
Ranked Among 6 Top Undergraduate Students University of Tabriz, Faculty of Electrical and Computer Engineering, Department of Control Engineering	2009
Ranked among the top 5 percent of all the examinees in Iranian nationwide entrance .exam of universities for graduate studies in Electrical Eng	2010
Ranked Among 3 Top Graduate Students University of Tabriz, Faculty of Electrical and Computer Engineering, Department of Control Engineering	2012
Accepted as the Member of the Exceptional Talented Students Organization University of Tabriz, Faculty of Electrical and Computer Engineering, Department of Control Engineering	2016
Best Teacher Award Achievement Technical and Vocational University of Tabriz	2018

## موضوعات تدریس تخصصی

- Computer Programming, from 2019, University of Tabriz
- Engineering Mathematics, from 2019, University of Tabriz
- Optimal Control, from 2020, University of Tabriz
- Modern Control, from 2020, University of Tabriz
- Advanced Numerical Analysis, from 2020, University of Tabriz
- Robotics, from 2021, University of Tabriz
- Autonomous Mobile Robots, from 2023, University of Tabriz
- Introduction to Computational and Biological Intelligence, from 2023, University of Tabriz
- Operation Research, from 2023, University of Tabriz
- Signal & System Analysis, from 2022, University of Tabriz
- Electrical and Electronic Circuits, from 2023, University of Tabriz
- Embedded Systems, from 2023, University of Tabriz
- Differential Equations, from 2019, University of Tabriz
- Engineering Economics, from 2019, University of Tabriz

- Electrical Installations, from 2019, University of Tabriz •
- Engineering Statistics and Probability, from 2019, University of Tabriz •
- Servomechanism, from 2019, Technical and Vocational University of Tabriz •
- Digital Control Lab, from 2019, University of Tabriz •
- Linear Control Lab, from 2019, University of Tabriz •

## کارگاه ها

Workshop has presented on **Design and Developmental of Surgical Robots and Telesurgery Systems** at ICCIA 2011

Workshop has presented on **Design and Developmental of Telesurgery Systems** at 5th Iranian Conference on E-Health and ICT Application in Medical Science, 2012

Workshop has presented on **Haptic and Virtual Reality** at IEEC 2012

Workshop has presented on **Virtual Reality** at University of Tabriz 2014

Workshop has presented on **Application of the Virtual Realty in the Control Engineering** at University of Tabriz 2019

Workshop has presented on **Introduction to the research indices and open access to the scientific resources engineering** at University of Tabriz 2019

Workshop has presented on **Game Theory and its Application in Robotics** at University of Tabriz 2020

Workshop has presented on **Haptic Application in Telesurgery Systems and Related Startups** at Shri Ramswaroop Memorial College of Engineering and Management, Lucknow- India 2022

Workshop has presented on **Analysis of the Sensors Allocation and Sampling Effect on the Performance of the Teleoperation Systems** at Sensors Econ-2022, London, England

Workshop has presented on **Application of Deep Learning and Vision Transformer in Healthcare** at Technische Universitat Kaiserslautern, Germany 2024

## همایش ها و کنفرانس ها

Executive Publication chair of the Forth International Congress on Electric Industry Automation-2015

Executive Coordination chair of the first National Conference on Novel Achievements on Electrical Engineering in Mines and Mineral Industry-2017

International Relations Chair of 28<sup>th</sup> **Iranian Conference on Electrical Engineering (ICEE 2020)-2020**

Informatics and International relation chairs of the 7<sup>th</sup> **international conference on Control, Instrumentation and Automation (ICCIA 2020)-2020**

Executive Committee Chair of 12th Annual Power Electronics, Drive Systems, and Technologies Conference (PEDSTC2021)-2021

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IEEE affairs chair of the 4<sup>th</sup> **West Asian Symposium on Optical and Millimeter-wave Wireless (Communications (WASOWC2022**

Executive Committee Chair of 12th Annual Power Electronics, Drive Systems, and Technologies Conference (PEDSTC2021)-2021

International Relation Chair of 9th International Conference on Technology and energy Management ((ICTEM2023

Executive Committee Chair of 10th International Conference on Technology and energy Management ((ICTEM2024

## عضویت در انجمن های علمی

- \*IEEE Senior Member
- \*IEEE Young Professionals Member
- \*IEEE Consultants Network Member
- \*IEEE Control Systems Society Member
- \*IEEE Robotics and Automation Society Member
- \*IEEE Nanotechnology Council Member
- \*IEEE Life Sciences Community Member
- \*IEEE Quantum Community Member

## مقالات در نشریات

- 
1. Reza Behinfaraz, Amir Aminzadeh Ghavifekr, Roberto De Fazio, Paolo Visconti, Utilizing Fractional Artificial Neural Networks for Modeling Cancer Cell Behavior, Electronics, 2023
  2. Reza Behinfaraz, Abdolmehdi Bagheri, Amir Aminzadeh Ghavifekr, Paolo Visconti, Risk Control for Synchronizing a New Economic Model, Systems, 2023
  3. Seyed Matin Malakouti, Amir Rikhtehgar Ghiasi, Amir Aminzadeh Ghavifekr, Parvin Emami, Predicting wind power generation using machine learning and CNN-LSTM approaches, Wind Engineering, pp. 1853-1869, 2022
  4. Seyed Matin Malakouti, Amir Rikhtehgar Ghiasi, Amir Aminzadeh Ghavifekr, AERO2022-flying danger reduction for quadcopters by using machine learning to estimate current, voltage, and flight area, e-Prime-Advances in Electrical Engineering, Electronics and Energy, 2022
  5. Marıa T Orvaıanos, Guerrero, Mario Acevedo, Claudia N Sınchez, Daniel U Campos, Delgado, Amir Aminzadeh Ghavifekr, Paolo Visconti, Ramiro Velızquez, Complete balancing of the six-bar mechanism using fully cartesian coordinates and multiobjective differential evolution optimization, Mathematics, 2022
  6. Amir Aminzadeh Ghavifekr, Roberto De Fazio, Ramiro Velazquez, Paolo Visconti, Sensors Allocation and Observer Design for Discrete Bilateral Teleoperation Systems with Multi-Rate Sampling, sensors, 2022
  7. Amir A Ghavifekr, Amir R Ghiasi, Mohammad Ali Badamchizadeh, Farzad Hashemzadeh, Exponential stability of bilateral sampled-data teleoperation systems using

- .multirate approach,ISA transactions,2020
- Amir A Ghavifekr, Amir R Ghiasi, Mohammad A Badamchizadeh, Farzad Hashemzadeh, Paolo Fiorini, Stability analysis of the linear discrete teleoperation systems with stochastic sampling and data dropout, European Journal of Control, pp. 63-71, 2018
- Amir Aminzadeh Ghavifekr, Amir Rikhtehgar Ghiasi, Mohammad Ali Badamchizadeh, Discrete-time control of bilateral teleoperation systems: a review, Robotica, 2018
- A.A. Ghavifekr, M.A. Badamchizadeh, A.R. Ghiasi, F. Hashemzadeh, Passivity Analysis of Discrete-time Counterparts of the Bilateral Controlled Teleoperation Systems, International Journal of Electrical, Electronics and Data Communication (IJEEDC), 2018
- A. A. Ghavifekr, M.A. Badamchizadeh, A.R. Ghiasi, Evaluation of Three Different Null Space Joint Velocities For a Redundant 5-Bar Linkage Manipulator, International Journal of Electrical, Electronics and Data Communication (IJEEDC), 2016
- A Ghavifekr, S Ghaemi, R Behinfaraz, A Modified biogeography based optimization (bbo) algorithm for time optimal motion planning of 5 dof pc-based gryphon robot, International Journal of Engineering works, 2014
- Amir Aminzadeh Ghavifekr, Arash Arjmandi, Kanan Sehat, Evaluation of Particle Swarm Optimization and Adaptive Genetic Algorithm for Motion Planning in Minimally Invasive Surgery, Majlesi Journal of Mechatronic Systems, 2012

## کتابها

- 
1. Designing Adaptive Nonlinear Controller for Optimal Tracking of Laparoscopic Robotic Arm with Nonholonomic Constraints
2. Application of Heuristic Techniques and Evolutionary Algorithms in Microgrids Optimization Problems
3. Use case of artificial intelligence and neural networks in energy consumption markets and industrial demand response
4. Optimizing PID Controller Coefficients Using an Improved Biogeography-Based Optimization to Stabilize Movements of Quadcopters
5. الگوریتم‌های فراابتکاری در مدیریت و بهینه‌سازی شبکه‌های هوشمند انتقال انرژی الکتریکی
6. شبکه‌های اجتماعی علمی برای پژوهشگران
7. اصول و مبانی کنترل غیرخطی
8. سیستم‌های کنترل از راه دور
9. جراحی رباتیک