







Ehsan Valian

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 [Google Scholar](#)  Kermanshah, Iran

Education

Master of Science in Electrical Engineering – Field and Wave Telecommunication 2009 - 2012
University of Sistan & Baluchestan, Zahedan, Iran

GPA: 16.76/20.00

Thesis Title: “Application of Neural Network in Electromagnetic Tomography in Detecting Hidden Metal Targets” (**Grade:** 20/20)

Bachelor of Science in Electrical Engineering - Electronics 2003 - 2008
Razi University, Kermanshah, Iran

GPA: 12.75/20.00 (**Last Two Year GPA:** 13.51)

Final Project Topic: “Analysis of Principal Components and Analysis of Independent and Functional Components (Image Processing, etc.)” (**Grade:** 19/20)

Research Interests

- Optimization Problem
- Machine Learning
- Neural Network
- Image Processing
- Computer Vision
- Electromagnetic Tomography

Language Competence and Test Scores

Persian (*Native*), kordish (*Native*), English (*Fluent*)

Publications

Journal Articles:

1. **Valian, Ehsan**, Saeed Tavakoli, and Shahram Mohanna. "An Intelligent Global Harmony Search Approach to Continuous Optimization Problems." **Applied Mathematics and Computation** (2014) ([Link](#))
2. **Valian, Ehsan**. "Solving reliability optimization problems by cuckoo search." **Cuckoo Search and Firefly Algorithm**. Springer, Cham (2014) ([Link](#))
3. **Valian, Ehsan**, and Elham Valian. "A Cuckoo Search Algorithm by Lévy Flights for Solving Reliability Redundancy Allocation Problems." **Engineering Optimization** 45, no. 11 (2013) ([Link](#))
4. Mohanna, Shahram, **Ehsan Valian**, and Saeed Tavakoli. "Nondestructive Position Detection of a Metallic Target within Soil Substrate Using Electromagnetic Tomography." **Research in Nondestructive Evaluation** 24, no. 4 (2013) ([Link](#))
5. **Valian, Ehsan**, Saeed Tavakoli, Shahram Mohanna, and Atiyeh Haghi. "Improved Cuckoo Search for Reliability Optimization Problems." **Comput. Ind. Eng.** 64, no. 1 (2013) ([Link](#))
6. Saeed Tavakoli, **Ehsan Valian**, and Shahram Mohanna. "Feedforward neural network training using intelligent global harmony search" (2012) ([Link](#))
7. **Valian, Ehsan**, Shahram Mohanna, and Saeed Tavakoli. "Improved cuckoo search algorithm for feedforward neural network training." **International Journal of Artificial Intelligence & Applications** 2.3 (2011) ([Link](#))
8. **Valian, Ehsan**, Shahram Mohanna, and Saeed Tavakoli. "Improved cuckoo search algorithm for global optimization." **International Journal of Communications and Information Technology** 1.1 (2011) ([Link](#))

Technical Skills

▪ MATLAB		▪ Python	
▪ Java		▪ ADSS	
▪ FEKO SUITE		▪ Network+	
▪ CCNA		▪ C++	
▪ Web Design (PHP, HTML, JavaScript)		▪ Telecommunication Networks (PLC, UHF, Fiber Optic)	

Professional and Academic Experience

▪ Telecommunications Supervising Expert

December 2013
– Present

- Telecommunications supervisor expert in dispatching West Regional Electricity Company
- Supervision, design and implementation of telecommunication projects in the electricity industry, including: fiber optic equipment, industrial call centers (private branch exchange), network communications, telecommunication protection systems (TPS), PLC systems, UHF wireless, telemetry and SCADA systems, microwave communications

West Regional Electric Company, Kermanshah, Iran

▪ Telecommunication Expert

March 2013 –
December 2013

- Telecommunication and fiber optic expert

Tehran Province Telecommunication Company, Tehran, Iran

▪ Part-time Instructor

2013 - 2019

- Electrical Circuits
- Electronic Engineering Foundations

Kermanshah University of Technology, Kermanshah, Iran

▪ Full-time Instructor

2011 - 2013

- Electrical Circuits
- Control

Islamic Azad University Eslam Abad-E Gharb, Eslamabad-e-Gharb, Iran

▪ Full-time Instructor

2011 - 2013

- Electrical Circuits
- Control
- Electronics
- Logic Circuits

Imam Reza Center of Applied Science and Technology, Eslamabad-e-Gharb, Iran

▪ Lab Instructor

2008 - 2009

- Logic Circuits

University of Sistan & Baluchestan, Zahedan, Iran

Projects

Selected Projects:

- **Design of internal telephone network of West Regional Electricity Company:**
 - Telephone network design and monitoring of telecommunication network implementation along with the installation of telephone exchanges between 100 transmission and distribution stations in the west's electricity network - using industrial telephone exchange systems including all digital, analog, trunking (SIP-E1) communications
- **Modification and design of Remote Protection Network (TPS) at West Regional Transmission Station:**

- *Design and monitoring of telecommunication network (TPS) implementation in 30 western regional power transmission stations on fiber optic and PLC substrates*
- **Network Modification (PLC) in West Regional Power Stations:**
 - *Design and supervision of telecommunication network implementation on PLC platform in 80 western regional power stations*
- **Modification and design of UHF wireless network in western regional power stations:**
 - *Design and implementation of UHF wireless network in 120 regional power stations - use of wireless and analog and digital repeaters of DMR technology*
- **Improvement of fiber optic network of West Regional Electricity Company:**
 - *Improving the fiber network, designing and supervising the implementation of the fiber optic network in 40 West Regional Electricity Companies - Using SDH-PDH equipment and network equipment and DWDM Renovation of the Western Regional Electricity Company*

Certifications and Workshops

- Analog PLC System Attend to the Theoretical and Practical Training Course DIMAT OPL Power Line Carrier Held in Tehran _Iran, 2020
- 2- day Webinar of STE –N II & TPS – NU equipment training organized jointly by SELTA S.P.A and restage 13-14 Oct. 2020
- DS200 Center training course for the duration of one month, equivalent to 20 hours in the training center for the development of efficient telephone services, 2019
- Successfully completed the course of service , Maintenance & Troubleshooting of Hipath 4000 on December 2019 With Technical Department of Payam Gostar Bellga The qualified Partner of Siemens in Iran
- Introduction to project control and obtaining a score of 16/20 from the Higher Education and Research Complex of West Electricity, 2019
- Introduction to Android programming, 40-hour and getting a grade of 100/100, Kermanshah Jihad-e Daneshgahi, 2018
- Advanced Android programming, 40-hour and getting a grade of 100/100, Kermanshah Jihad-e Daneshgahi, 2018
- SCADA Telecommunications and System, 30-hour with a score of 20/20 from the Higher Education and Research Complex of West Kermanshah, 2017
- Introduction to SMS and DCS, 30-hour with a score of 20/20 from the Higher Education and Research Complex of West Kermanshah, 2017
- Introduction to common protocols in the electricity industry, 30-hour with a score of 20/20 from the Higher Education and Research Complex of West Kermanshah, 2017
- Certificate for the ABB560 terminal from, 16-hour from the Higher Education and Research Complex of West Kermanshah, 2017
- Preliminary GIS in the transmission and super-distribution sector, 36-hour with a score of 19/20 from the Higher Educational and Research Complex of West Kermanshah, 2016
- Digital PLC System TYPE OPU – 1 Attended the theoretical and practical Training Coerces DIMAT OPU –Digital Power Line Carrier Held in Mashhad – Iran, 2016
- Successfully Completed 7 days Course of Service , Maintenance & Troubleshooting of Osbiz X8 on June 2016 with Technical Department of Payam Gostar Bellga the qualified partner of Unify in Iran, 2016
- Introduction to optical fibers, 30-hour with a score of 19/20 from the Higher Education and Research Complex West of Kermanshah, 2015
- Certificate for Security+, 48-hour with a score of 19/20 from the Higher Education and Research Complex West Kermanshah, 2015
- Introduction to telecommunication equipment, 18-hour with a score of 20/20 from the Higher Education and Research Complex of West Kermanshah, 2015
- Land system course, 30-hour with a score of 18/20 from the Higher Education and Research Complex West Kermanshah, 2015
- Dispatching and telemetry telecommunication systems course, 30-hour with a score of 19/20 from the Higher Education and Research Complex West of Kermanshah, 2014
- Completed the training course on SELTAS Products / systems totally 80 hours: PLC “Power Line Carrier “Equipment Type STE- D.Held in Tehran, 2014

- DPLC course held by the deputy director of the country's electricity network, the management of Iran's electricity network, December 2013
- WiMAX to LTE transformation course, held by Mobinnet Telecommunication Company in the 20th International Exhibition of Electronics, Computers and Electronic Commerce, 2014
- CISCO Routing Phase 2 (CCNA INTRO) training course, 42-hour with a score of 98/100, Faratar Rayaneh Engineering Company (Cybertech), Tehran, 2013
- Phase 2 training course of CCNA1 routers, 36-hour with a score of 70/100, Faratar Rayaneh Engineering Company (Cybertech), Tehran, 2013
- Network+ training course, 36-hour with a score of 88/100, Faratar Rayaneh Engineering Company (Cybertech), Tehran, 2013
- Basic principles of mobile communication, 30-hour with a score of 15/20, Mobile Telecommunication Company, Iran, 2007

References

- Dr. Seyyed Saeed Tavakkoli Afshhari
([Google Scholar](#))
Associate Professor, Department of Electrical Engineering, University of Sistan & Baluchestan, Zahedan, Iran
tavakoli@ece.usb.ac.ir
- Dr. Shahram Mohanna
([Google Scholar](#))
Assistant Professor, Department of Electrical Engineering, University of Sistan & Baluchestan, Zahedan, Iran
mohana@ece.usb.ac.ir
- Dr. Ali Naderi
([Webpage](#))
Associate Professor, Department of Energy, Kermanshah University of Technology, Kermanshah, Iran
a.naderi@kut.ac.ir