**Abbas Rezaei**

Assistant Professor in Electronic Engineering
Department of Electrical Engineering
Kermanshah University of Technology, Kermanshah, Iran
E-mail: a.rezaee@kut.ac.ir, unrezaei@yahoo.com

## PERSONAL INFORMATION

Date of Birth: 13- June- 1982
Place of Birth: Kermanshah
Nationality: Iranian
Gender: Male
Marital Status: Married

## UNIVERSITY EDUCATION

### Ph.D.
In Electronic Engineering , Razi University, Kermanshah, Iran, 2010- 2013.
Title of Thesis:
New methods for design, optimization and simulation of QCA-based circuits

### M. Sc.
In Electronic Engineering, Razi University, Kermanshah, Iran, 2007- 2009.
Title of Thesis:
Application of artificial neural network for modeling of CNTMOSFET

### B. Sc.
In Electronic Engineering, Razi University, Kermanshah, Iran, 2001- 2005.
Title of Thesis:
Design and implementation of a multi-task measurement equipment

## EMPLOYMENT
Assistant Professor, Kermanshah University of Technology, Kermanshah, Iran
(2014-present)

# RESEARCH INTERESTS

Nanotechnology
Quantum-dot cellular automata
Artificial intelligence
Neural network, Adaptive neuro-fuzzy inference system
VLSI
Nano scale transistors
Design and implementation of electronic equipment
Mobile sets softwares (Android programing)

# EDUCATIONAL BACKGROUND

3 Years in Kermanshah University of technology
6 Years in Islamic Azad University
1 Year in Payam-e-Noor
2 Years in Jahad University

# RESEARCH PROJECTS

1- Electronic component calculator software under Android operating system
Place of Work: Kermanshah University of technology
Dates: 2014-2014


2- Design and implementation of Android software for CMOS and TTL ICs
Place of Work: Kermanshah University of technology
Dates: 2014-2014


3- BJT transistors datasheet software under Android operating system
Place of Work: Kermanshah University of technology
Dates: 2014-2014


4- Design and implementation of Android software for AVR and PIC microcontrollers
As Fellow
Place of Work: Kermanshah University of technology
Dates: 2014-2014

5- Simulation of logic Gates by artificial neural network
As Fellow
Place of Work: Razi University
Dates: 2008-2009


6- Design and implementation of comprehensive software for Kermanshah Oil Refining Company under Android operating system
Place of Work: Kermanshah Oil Refining Company
Dates: 2015-2015


7- Design and construction of oil quality detector
As Fellow
Place of Work: Kermanshah Oil Refining Company
Dates: 2016-2016


8- Design of a Microstrip Low Noise Amplifire for WLAN Application
Place of Work: Kermanshah University of technology
Dates: 2016-2016


9- Flow Pattern Prediction in Sharp Open-channel Bends by Computational-intelligence Methods: Multi-layer Perceptron, Radial Basis Function and Adaptive Neuro-fuzzy Inference system
As Fellow
Place of Work: Kermanshah University of technology
Dates: 2016-2016


10- Design and implementation of a new iPhone using GSM technology
Place of Work: Kermanshah University of technology
Dates: 2016-2016


# No. Of PhD PROJECTS

Current: 1 as Advisor


# No. Of Mse PROJECTS

Finished: 1 as Supervisor, 2 as Advisor
Current: 9 as Supervisor

## No. Of Bse PROJECTS

Finished: 2 as Supervisor, 2 as Advisor
Current: 2 as Supervisor, 1 as Advisor

## LANGUAGE PROFICIENCY

Writing, Reading and Speaking
Persian: Native
English: Fluent
Kurdish: Fluent

## COMPUTER SKILLS

MATLAB (Simulink and Programing), Skilled
Android Programing, Skilled
Computational Intelligence (Fuzzy, ANFIS & Neural network Systems), Skilled
Microcontrollers Programming (AVR, PIC, 8051) , Skilled
HSPICE, Skilled
Proteus, Skilled
L-Edit, Skilled

## JOURNAL PUBLICATIONS

1- Application of Artificial Neural Network for Modeling and Prediction of MTT Assay on Human Lung Epithelial Cancer Cell Lines
M Taghipour, AA Vand, **A Rezaei**, GR Karim
*Journal of Biosensors & Bioelectronics , 2015*

2- Prediction of Optimum Gas Mixture for Highest SXR Intensity Emitted by A 4kj Plasma Focus Device Using Artificial Neural Network
GH Roshani, M Habibi, A Sadighzadeh, **A Rezaei**
*Boson Journal of Modern Physics 1 (1), 1-10, 2015*

3- Prediction of the thickness of the compensator filter in radiation therapy using computational intelligence
V Dehlaghi, M Taghipour, A Haghparast, GH Roshani, **A Rezaei**, ...
*Medical Dosimetry 40 (1), 53-57,1 , 2015*

4- Design of novel efficient adder and subtractor for quantum-dot cellular automata

M Hayati, **A Rezaei**

*International Journal of Circuit Theory and Applications,1, 2014*

5- New approaches for modeling and simulation of quantum-dot cellular automata

M Hayati, **A Rezaei**

*Journal of Computational Electronics 13 (2), 537-546,1,2014*

6- An Efficient and Optimized Multiplexer Design for Quantum-Dot Cellular Automata

M Hayati, **A Rezaei**

*Journal of Computational and Theoretical Nanoscience 11 (1), 297-302,3,2014*

7- Design of novel efficient XOR gates for quantum-dot cellular automata

M Hayati, **A Rezaei**

*Journal of Computational and Theoretical Nanoscience 10 (3), 643-647,4, 2013*

8- Application of Radial Basis Function Network for the Modeling and Simulation of Turbogenerator

M Hayati, **A Rezaei**, L Noori

*Journal of Advances in Information Technology 4 (2), 76-79,1,2013*

9- An Optimized Design of Anode Shape Based on Artificial Neural Network for Achieving Highest X-ray Yield in Plasma Focus Device

M Hayati, GH Roshani, H Abdi, **A Rezaei**, M Mahtab

*Journal of Fusion Energy, 1-7, 3, 2013*

10- Application of Adaptive Neuro-Fuzzy Inference System for Predictaion of HEMT Transistor Noise Parameters

M Hayati, **A Rezaei**

*International Journal of Modeling and Optimization, Vol. 2, No. 5, October 2012*

11- Application of artificial neural network for prediction of the oxidation behavior of aluminized nano-crystalline nickel

AM Rashidi, M Hayati, **A Rezaei**
*Materials & Design 42, 308-316,7,2012*

12- Prediction of the mass gain during high temperature oxidation of aluminized nanostructured nickel using adaptive neuro-fuzzy inference system
M Hayati, AM Rashidi, **A Rezaei**
*Solid State Sciences 14 (10), 1426-1430,1,2012*

13- Modelling of LDMOS transistor using artificial neural networks: DC and RF performances
M Hayati, **A Rezaei**, R Movahedi
*International Journal of Electronics 99 (7), 907-923,2012*

14- Design and optimization of full comparator based on quantum-dot cellular automata
M Hayati, **A Rezaei**
*ETRI Journal 34 (2), 284-287,13,2012*

15- Prediction of the relative texture coefficient of nanocrystalline nickel coatings using artificial neural networks
AM Rashidi, M Hayati, **A Rezaei**
*Solid State Sciences 13 (8), 1589-1593,8,2011*

16- Prediction of grain size of nanocrystalline nickel coatings using adaptive neuro-fuzzy inference system
M Hayati, AM Rashidi, **A Rezaei**
*Solid State Sciences 13 (1), 163-167,9,2011*

17- Modeling and Simulation of Centrifugal Gas Compressor Using Adaptive Neuro-Fuzzy Inference System: Application to the Modeling and Simulation of the Industrial Packages
M Havati, SM Jamshidi, **A Rezaei**
*International Review on Modelling and Simulations, 4 (1),2011*

18- Double gate MOSFET modeling based on adaptive neuro-fuzzy inference system for nanoscale circuit simulation
M Hayati, M Seifi, **A Rezaei**

*ETRI journal 32 (4), 530-539,9,2010*

19- Prediction of HEMT transistor noise parameters using computational intelligence method
M Hayati, **A Rezaei**, B Akhlaghi
*The 1 st International Conference on Computation for Science and Technology, 5,2010*

20- Modeling and simulation of combinational CMOS logic circuits by ANFIS
M Hayati, **A Rezaei**, M Seifi, A Naderi
*Microelectronics Journal 41 (7), 381-387,11,2010*

21- CNT-MOSFET modeling based on artificial neural network: Application to simulation of nanoscale circuits
M Hayati, **A Rezaei**, M Seifi
*Solid-State Electronics 54 (1), 52-57,15,2010*

22- Prediction of the heat transfer rate of a single layer wire-on-tube type heat exchanger using ANFIS
M Hayati, **A Rezaei**, M Seifi
*international journal of refrigeration 32 (8), 1914-1917,16,2009*

23- HEMT Transistor Noise modeling using generalized radial basis function
M Hayati, A Shamkhani, **A Rezaei**, M Seifi
*Semiconductor Electronics, 2008. ICSE 2008. IEEE International Conference on 25-27 Nov. 2008*

24- The computational intelligence in simulation of DG MOSFET: Application to the simulation of the nanoscale CMOS circuit
M Hayati, M Seifi, **A Rezaei**
*2008 IEEE International Conference on Semiconductor Electronics,3,2008*

25- Predicting Performance of Ferromagnetic Cored Transformers using Computational Intelligence Method
M Hayati, **A Rezaei**
*International Conference on Computer Graphics, Simulation and Modeling (ICGSM'2012) July 28-29, 2012 Pattaya (Thailand)*

26- The Use of ANFIS and RBF to Model and Predict the Inhibitory Concentration Values Determined by MTT Assay on Cancer Cell Lines
**A Rezaei**, L Noori
*International Journal of Information Technology and Computer Science(IJITCS), 2016.*

27- Design of QCA Full Adders without wire crossing
A Mostafaee, **A Rezaei**, MM Karkhanehchi, SM Jamshidi
*Boson Journal of Modern Physics 2 (2), 90-96, 2015.*

28- Implementation of a complete gate for quantum-dot cellular automata
**A Rezaei**
*Boson Journal of Modern Physics 2 (2), 84-89, 2015.*

29- Design of novel efficient adder and subtractor for quantum- dot cellular automata
M Hayati, **A Rezaei**
*International Journal of Circuit Theory and Applications 43 (10), 1446-1454,1, 2015.*

30- Prediction of equilibrium scour depth in uniform non-cohesive sediments downstream of an apron using computational intelligence
A Eghbalzadeh, M Hayati, **A Rezaei**, M Javan
*European Journal of Environmental and Civil Engineering, 1-14, 2016*

31- Application of artificial neural network in precise prediction of cement elements percentages based on the neutron activation analysis
EE Zadeh, SAH Feghhi, GH Roshani, **A Rezaei**
*The European Physical Journal Plus 131 (5), 1-8, 2016*

32- Parameters estimation of squirrel-cage induction motors using ANN and ANFIS
MA Jirdehi, **A Rezaei**
*Alexandria Engineering Journal 55 (1), 357-368, 2016*

33- Modeling of relative intensity noise and terminal electrical noise of semiconductor lasers using artificial neural network

**A Rezaei**, L Noori

*International Nano Letters, 1-6 , 2016*

34- Tunable microstrip dual-band bandpass filter for WLAN applications

**A Rezaei**, L Noori

*Turkish journal of electrical engineering & computer sciences, 2016*

# CONFERENCE PUBLICATIONS

۱- بررسی و تحلیل مشکلات محافظ تله موجها بر روی خطوط انتقال و فوق توزیع و ارائه راهحل مناسب جهت کاهش هزینههای تعمیر و نگهداری در ایستگاههای فشارقوی

هانیه حاضری- **عباس رضایی**

سومین کنفرانس ملی و اولین کنفرانس بینالمللی پژوهشهای کاربردی در مهندسی برق، مکانیک و مکاترونیک

۲۹ بهمن ماه ۹۴- تهران

Novel efficient designs for QCA JK flip flop without wire crossing -۲

دومین کنفرانس بین المللی و سومین همایش ملی کاربرد فناوری های نوین در علوم مهندسی

**عباس رضایی**- لیلا نوری

۶ اسفند ماه ۹۴- مشهد- دانشگاه فردوسی

۳- طراحی و پیادهسازی مقایسهگر کامل تک بیتی در تکنولوژی QCA

عابد مصطفایی- **عباس رضایی**- محمد مهدی کارخانهچی

اولین کنفرانس بینالمللی دستاوردهای نوین پژوهشی در مهندسی برق و کامپیوتر

۲۴ اردیبهشت ماه ۹۵- تهران - دانشگاه صنعتی امیرکبیر

۴- کاربرد شبکه پرسپترون چندلایه در تحلیل جریان کانالهای روباز با قوس تند۹۰ درجه

امید سید اشرف- **عباس رضایی**

دومین کنفرانس بین المللی دستاوردهای نوین پژوهشی در عمران، معماری و مدیریت شهری

۳۱ اردیبهشت ماه -۱۳۹۵ - تهران دانشگاه صنعتی امیرکبیر

۵- طراحی جدید از مالتی پلکسرها در تکنولوژی QCA

عابد مصطفایی- **عباس رضایی**- محمد مهدی کارخانهچی- میترا موید

دومین کنفرانس ملی فناوری، انرژی و داده با رویکرد مهندسی برق و کامپیوتر

۱۳ خرداد ماه ۹۵ ـ کرمانشاه


۶ ـ طراحی تقویت کننده کم نویز میکرواستریپی برای کار در سیستم‌های WLAN

لیلا نوری ـ **عباس رضایی**

دومین کنفرانس بین المللی و سومین همایش ملی کاربرد فناوری های نوین در علوم مهندسی

۶ اسفند ماه ۹۴ ـ مشهد


۷ ـ طراحی جمع کننده در تکنولوژی QCA

شهرام نادریان ـ **عباس رضایی** ـ محمد مهدی کارخانه‌چی ـ عابد مصطفایی

اولین کنفرانس بین‌المللی دستاوردهای نوین پژوهشی در مهندسی برق و کامپیوتر

۲۴ اردیبهشت ماه ۹۵

تهران ـ دانشگاه صنعتی امیرکبیر


۱۰