

Technical Tools

Programming: Proficient in Matlab, PHP, C ++, C#, Python.

Databases: MySQL, PostgreSQL, SQL server.

Typesetting: Proficient in Latex, Word.

Utilities: GitHub, Linux, OpenCV.

Knowledge: Software Engineering, Machine Learning, Computer vision, Face Recognition, Stochastic Optimization. Statistic

Professional Experiences

Research Engineer, Jan 2016 to present – Remote sensing Lab NAU, FLAGSTAFF, AZ

- Simulation of biochemical reaction in C++.
- Simulation of Cognitive radio network in MATLAB.

Research Engineer, MAY 2016 to Aug 2016 – Cybersecurity Lab NAU, FLAGSTAFF, AZ

- PUF user authentication using image processing in MATLAB.

Web Developer, Jan 2011 to 2015 – TRN co, Iran

- PHP, XML, HTML, JQuery, MySQL, PostgreSQL
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Academic Projects

- Optimizing communication channel using Particle Swarm method and online machine learning. 2017
 - Software Controlling system for Robotic arm using brainwave (bachelor thesis) 2015
 - Self optimizing Invensense's 6 DoF Accelerometer/Gyro MPU-6000 using Kalman Filter. 2015
 - Implementing SLAM algorithm and Face recognition for @home robot in C# , C++, Python. 2014
 - Controlling mouse cursor using eye tracking in C#. 2010
 - 3D soccer team simulation in C#. 2010
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Educations

NORTHERN ARIZONA UNIVERSITY – Flagstaff AZ

Master of Science in Electrical Engineering (MSc) GPA:3.75

AZAD UNIVERSITY OF TEHRAN – Tehran, Iran

Bachelor of Science in Electrical Engineering (BSc)

Publications

1. A.Valehi, A.Razi "Maximizing Energy Efficiency of Cognitive Wireless Sensor Networks by Online Learning" 2017 Asilomar Conference on Signals, Systems and Computers (submitted)
2. A.Valehi, A.Razi "Energy efficient frame jointing under delay constraints" IEEE Transactions on Cognitive Communications and Networking (submitted)
3. A.Valehi, A.Razi, B.Cambou, W.Yu, M.Kozicki, " A graph matching algorithm for user authentication in data networks using image-based physical unclonable functions" 2017 SAI Computing Conference, UK, 2017.
4. A.Razi, A.Valehi "Delay minimization by adaptive framing policy in cognitive sensor networks" 2017 IEEE Wireless Communications and Networking Conference, San Francisco, 2017.
5. M SOUFI, M AMINI, MA ZOMORODIAN, A VALEHI "DESIGNING THE LOW NOISE 2 GHZ AMPLIFIER FOR THE RF RECEIVERS" IOSR JOURNALS 2016
6. K. S. Oskoooyee, M. R. Kashani, N. Aref, M. Ghaemi, A. Valehi and F. J. Moghaddam, "Robots in love: Evolutionary psychology, artificial life, and cognitive robotics," 2012 IEEE 11th International Conference on Cognitive Informatics and Cognitive Computing, JP, 2012, pp. 460-464.