

C U R I I C U L A M V I T A I

MOHAMMAD REZA JABBARPOUR SATTARI

Research Analyst and Network Specialist

Mobile: 0060 17 623 8395

Website: rezajabbarpour.com

E-mail: Jabbarpour.mr@gmail.com

SUMMARY

More than 4 years research and network projects lead experience.

TECHNICAL SKILLS

Networking

- Network Administration
 - LAN / WAN Design, Implementation, Troubleshooting.
 - Leased Line, Wireless , Proxy and Firewall
 - Protocols & Services: TCP/IPv4/IPv6, IPX, PPP/HDLC, PPTP, SNMP, RIPv1-2, BGP4, EIGRP, OSPFv1-2, PBR, VLAN, HSRP, VP, DNS, DHCP, NAT, MGRE, DMVPN, Multicast Routing, 802.11
- CISCO Routers and Switches
- VoIP
- Cloud Computing

Systems:

- Microsoft Windows® XP and Microsoft Windows 7, Vista, Linux

Programming Languages

- Proficient in: C, PHP
- Familiar with: C#, Java, MATLAB

Software

- Database: Microsoft SQL Server, MySQL and Microsoft Access
- Networking: Packet Design, Packet Tracer, NS2, SUMO, TraCI
- MS Office: Word, Excel, Outlook, Access, PowerPoint
- Publishing software: EndNote, LATEX
- Project Management: Rational Rose, Microsoft SharePoint Server

Others

- Image processing
 - Pattern recognition
 - MCIPT course of Microsoft specially; Costumer Support Technician course (Code 70-620)
-

EXPERIENCE

Research assistant

August 2012- Present

University Malaya R&D center

- Discovering and analyzing required elements of vehicle traffic routing algorithms.
- Conducting research on vehicular networks, platforms, procedures and infrastructure.
- Conducting studies on existing bio-inspired vehicle traffic routing techniques and available approaches.
- Presenting a classification for the existing research trends within the area of vehicle traffic routing and congestion control.
- Providing a taxonomy and statistical overview of ant-based approaches, which are used in vehicle traffic routing systems.
- Designing a scalable vehicle traffic congestion avoidance framework using ant-based algorithm.
- Developing the proposed framework in simulation environment using network simulator, mobility generator and VANET simulator.
- Evaluating and analyzing the proposed framework with different set of scenarios and evaluation metrics
- Conducting research and studies on vehicular cloud.

HONORS AND REWARDS

- Achieving High Impact Research (HIR) full scholarship for PhD degree from Ministry of Higher Education Malaysia.
 - Intellectual Property right, System and Method for Relieving Traffic Congestion, Patent, PI 2014703373, 2014.
 - Receiving Asia Invention Association grand award and Gold medal for an invention entitled "System and Method for Relieving Traffic Congestion" from World Invention Innovation Contest, WiC 2015, Seoul, Korea.
 - Intellectual Property right, A Novel Green Car Navigation System for Vehicle Congestion Avoidance using Ant-based Algorithm, Copyright, LY2014001218.
 - Receiving Merit Award for an invention entitled "Intelligent Guardrails for Vehicle Traffic Congestion Reduction in Smart Cities" from Singapore Challenge: The Science of Future Cities, 2015 Singapore.
 - Awarded the distinction for PhD thesis, University of Malaya, 2015.
 - Achieving the first rank of the class among all students of Computer Sciences intake 2010, University of Malaya, Kuala Lumpur, Malaysia.
 - Achieving the best rank of the class among all students of Information Technology engineering intake 2005 (among top 10%), University College of Nabi Akram (UCNA), Tabriz, Iran.
-

PROJECTS

- Efficient Green Operational Rescue Using Vehicular Ad hoc Technology, 2012-2015, University of Malaya, Malaysia
- Dynamic D-FPAV Congestion Control Algorithm for VANETs, 2011-2012, University of Malaya, Malaysia
- Detection of Handwritten Farsi Digits, 2009, University College of Nabi Akram (UCNA), Iran
- Investigation on Arabic Language Morphology, 2008, University College of Nabi Akram (UCNA), Iran

EDUCATION

- 2012 to 2015: PhD of Computer Science with Specialization of Data Communication and Computer Networks from University of Malaya (UM), Malaysia. Project title: Ant-based Vehicle Congestion Avoidance Framework using Vehicular Networks. (Distinction)
- 2010-2012: Master of Computer Science with specialization of Data Communication and Computer Networks from University of Malaya (UM), Malaysia, with GPA: 3.88 out of 4. Research project title: "Dynamic D-FPAV Congestion Control Algorithm for VANETs". (Distinction)
- 2005-2009: B.Sc Diploma in field of Information Technology (IT) from University College of Nabi Akram (UCNA), Iran, with G.P.A 17.18 out of 20. Project title: "Detection of handwritten Farsi digits using the similarity of patterns with MATLAB software in order to implement it"

PUBLICATIONS

Books:

- "Dynamic Congestion Control Algorithm for Vehicular Ad hoc networks", Saarbrücken, Germany: LAP Lambert Academic Publishing, ISBN 978-3-659-43220-0, 2015, pp. 1-81.

Journals:

- "Ant Colony Optimisation for Vehicle Traffic Systems: Applications and Challenges", *International Journal of Bio-Inspired Computation* (IF = 1.682, Q1), Vol. 6, No. 1, pp. 32-56, 2014.
 - "Opportunistic XOR-Coding Content Propagation in VANET", *International Journal of Computer & Electrical Engineering*, Vol. 6, 2014.
 - "Cross-layer Congestion Control Model for Urban Vehicular Environments", *Journal of Network and Computer Applications* (IF = 1.772, Q1), Vol. 44, pp. 1-16, 2014.
 - "Ant-based Vehicle Congestion Avoidance System using Vehicular Networks", *Engineering Applications of Artificial Intelligence* (IF = 1.962, Q1), Vol. 36, pp. 303-319, 2014.
-

- “Dynamic Congestion Control Algorithm for Vehicular Ad-hoc Networks”, *International Journal of Software Engineering and Its Applications (IJSEIA)*, Vol. 7, No. 3, May, 2013.
- “Intelligent Advisory Speed Limit Dedication in highway using VANET”, *Scientific World Journal* (IF = 1.7, Q1).
- “Performance Analysis of V2V Dynamic Anchor Position-based Routing Protocols”, *Wireless Networks Journal* (IF= 1.055, Q3).
- “Analyzing the Impacts of Velocity and Density on Intelligent Position-based Routing Protocols”, *Journal of Computational Science* (IF=1.567, Q2).
- “Green Vehicle Traffic Routing System using Ant-based Algorithm”, *Journal of Network and Computer Applications* (IF = 2.229, Q1).
- "Adaptive Green Traffic Signal Controlling using Vehicular Communication", *Transportation Research Part C: Emerging Technologies* (IF=2.82, Q1), 2015. Submitted April 2015.
- "A Survey on Cloud-enabled Vehicular Networks: Architectures, Applications and Open Issues", *The IEEE Transactions on Intelligent Transportation Systems* (IF = 2.377, Q1), Submitted July 2015.

Conferences:

- Classification for SIP protocol attacks, *1st international Conferences on Iranian students in Malaysia*, April 8-9, 2011, KL, Malaysia.
 - “Session Initiation Protocol Attacks and Challenges”, *2012 International Proceeding on Security Science and Technology (ICSST 2012)*, March 10-12, 2012, Hong Kong (ISI/SCOPUS Cited Publication)
 - “A Taxonomy for Congestion Control Algorithms in Vehicular Ad Hoc Networks”, *The IEEE International Conference on Communication, Networks and Satellite (COMNETSAT 2012)*, July 12-14, 2012, Bali, INDONESIA. (IEEE Cited Publication)
 - “Using VANET to Support Green Vehicle Communications for Urban Operation Rescue”, *12th International Conference on ITS Telecommunications*, November 5-8, 2012, Taipei, Taiwan. (ISI Cited Publication)
 - “A Traffic Control Model on VANET Environment for Minimum Road Risk in a Shortest Way”, *The International Conference on Green High Performance Computing (ICGHPC'13)* March 14-15, 2013, St.Xavier's Catholic College of Engineering, India. (IEEE Cited Publication)
 - “Vehicle Ad-hoc Sensor Network Framework to Provide Green Communication for Urban Operation Rescue”, *3rd International Conference on Information and Network Technology (ICINT 2013)* April 1-2, 2013, Singapore.
 - “A Dynamic Vehicle Traffic Control using Ant Colony and Traffic Light Optimization”, *International Conference on Systems Science (ICSS 2013)*, September 10-12, 2013, Wroclaw, Poland. (ISI/SCOPUS Cited Publication)
 - “The Comparative Analysis of Velocity and Density in VANET Using Prediction-Based Intelligent Routing Algorithms”, *Second International Conference on Future Generation*
-

Communication Technologies (FGCT 2013), December 12-14, 2013, London, UK. (IEEE Cited Publication)

- "Intelligent Speed Limit Information Dissemination in Highways Using Vehicular Ad-hoc Network", *Asia Pacific Conference on Wireless and Mobile 2014 (APWiMob 2014)*, 28-30 August, 2014, Bali, INDONESIA. (IEEE Cited Publication)
- "An Intelligent Overtaking Maneuver Assistant System using VANET", *Asia Pacific Conference on Wireless and Mobile 2014 (APWiMob 2014)*, 28-30 August, 2014, Bali, INDONESIA. (IEEE Cited Publication)
- "A Taxonomy-based Comparison of Vehicle Cloud Architectures", *The 3rd International Conference on Information and Computer Networks (ICICN 2015)*, 19-20 March 2015, Florence, Italy.
- " A Novel Comprehensive VANET-based Congestion Pricing Zone Management System", *The 14PthP International Conference on Traffic and Transportation Engineering (ICTTE 14)*, 24-25 February, 2015, Tehran, Iran.

ACADEMIC REVIEWER

- Editorial Board of Journal of Control Science and Engineering, ISSN (2328-2231), USA
- IET Networks and Intelligent Transport Systems journals
- Wireless Personal Communications journal
- International Journal of Wireless Information Networks
- Neural computing and applications journal
- International Journal of Wireless Information Networks

TECHNICAL COMMITTEE MEMBER

- International Conference on System Engineering and Technology (Shah Alam, Malaysia)
- The 13th International Conference on Intelligent Transportation Systems Telecommunications (Tampere, Finland)
- The 3rd International Conference on Connected Vehicles & Expo (Vienna, Austria)
- The 12th International Conference on Mobile Web and Intelligent Information Systems (Rome, Italy)
- The 4th International Conference on Connected Vehicles & Expo (ICCVE 2015) (Shenzhen, China)

MEMBERSHIPS

- IEEE Society, Student Member, 2012, (International)
 - Member of International Association of Computer Science and Information Technology (IACSIT), 2012
 - Member of science and engineering institute (SCIEI), 2012
-

LANGUAGE SKILLS

- English: Well (speaking - writing)
 - Persian: Fluent (speaking - writing)
 - Turkish: Fluent (speaking -writing)
-

REFERENCES – Available upon request