

Shahrooz Pouryousef

☎ +14134042650 • ✉ shahrooz@cs.umass.edu

Expertise and Skills

- 1+ years of experience in designing algorithms for resource allocation in quantum networks
- 3+ years of experience in traffic engineering and routing protocols in classical networks
- 1+ years of experience in using reinforcement learning techniques for networking problems
- Strong background in integrating and extending cutting-edge techniques to problem-driven research and real-world application
- **Proficient:** Python, Tensorflow, IBM Cplex, L^AT_EX

Education

UMass Amherst Ph.D Candidate of Computer Science	Aug. 2017 – Present
Sharif University of Technology Master Degree of Computer Engineering	Sep. 2013 – Aug. 2015
Shahid Madani University of Azarbayjan Bachelor Degree of Information Technology and Computer Engineering	Sep. 2009 – Sep. 2013

Research Experience

Quantum networks research lab	Aug. 2020 - Present
<ul style="list-style-type: none">○ Design, formal analysis, and evaluation of Quantum Overlay Networks(QONs).○ Using Reinforcement Learning for scheduling requests at Quantum switches	
Advanced Network Systems Research lab	Aug. 2017 - 2020
<ul style="list-style-type: none">○ Design and implementation of a logically centralized architecture and system for interdomain routing○ Implementation of a reinforcement learning system for traffic engineering in Intradomain routing for ISPs	
Calipr research group	Aug. 2018 - Dec 2019
<ul style="list-style-type: none">○ Developing an open source framework which conducts longitudinal Internet-scale measurements to identify when popular domains are victims of typosquatting	

Publications

- **Shahrooz. Pouryousef**, Nitish K. Panigrahy , and Don Towsley . “A Quantum Overlay Network for Efficient Entanglement Distribution (Submitted), 2022.
 - **Shahrooz. Pouryousef**, Lixin Gao, and Arun Venkataramani . “Towards Logically Centralized Interdomain Routing”, 17th USENIX Symposium on Networked Systems Design and Implementation (NSDI '20 Fall), 2020.
 - **Shahrooz. Pouryousef**, Muhammad Daniyal Dar,Suleman Ahmad, Phillipa Gill, and Rishab Nithyanand . “ Extortion or Expansion? An investigation into the costs and consequences of ICANN’s gTLD experiments”, Passive and Active Measurement Conference, Measurement tools and Network security and privacy track, 2020.
- Gao, Z., Sepahi, A., **Shahrooz. Pouryousef**, Zhou, L., & Zhu, H. (2022, May). Tradeoff between Privacy and Utility for Location-based Recommendation Services. In ICC 2022-IEEE International Conference on Communications (pp. 4396-4401). IEEE.

Awards & Honors

- Ranked 2nd among 42 students in class of 2013 Computer Engineering 2013
- Accepted as a talented student for graduate studies in Sharif University of Technology 2013
- Ranked 7th among 144 students in class of 2009 Computer Engineering entrants 2015
- Member of Iranian National Elite Foundation 2015