

Bio Sketch

Hana Khamfroush, PhD

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Assistant Professor

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Professional Preparation

Urmia University	Iran	Electrical Engineering	B.Sc., 2005
Yazd University	Iran	Telecommunications Engineering	M.Sc., 2009
University of Porto	Portugal	Telecommunications Engineering	Ph.D., 2014
Penn State University	USA	Computer Science	Postdoc., Jan 2015-Jan 2016

Appointments

2018-present	Assistant Professor, Computer Science Department, University of Kentucky
2016-2017	Research Associate, Computer Science Department, Penn State University
2015-2016	Postdoc, Computer Science Department, Penn State University
2010-2014	Research Assistant, Instituto de Telecomunicacoes (IT), Porto, Portugal

Recent peer-reviewed Publications

1. N. Hudson, **H. Khamfroush**, "Behavioral information diffusion for opinion maximization in online social networks", IEEE Transactions on Network Science and Engineering, 2020.
2. V. Farhadi, F. Mehmeti, T. He, T. La Porta, **H. Khamfroush**, S. Wang, K. Chan, K. Poularikis, "Service Placement and Request Scheduling for Data-intensive Applications in Edge Clouds," accepted for publication in IEEE Transactions on Networking, 2020.
3. N. Hudson, **H. Khamfroush**, B. Harrison, A. Craig, "Smart Advertisement for Maximal Clicks in Online Social Networks Without User Data", IEEE SMARTCOMP 2020.
4. E. C. Hufbaer, N. Hudson, **H. Khamfroush**, "A Proximity-Based Generative Model for Online Social Network Topologies," ICNC 2020.
5. X. Zhao, M. Hosseinzadeh, N. Hudson, **H. Khamfroush**, D. Lucani, "Improving Accuracy-Latency Trade-off of Edge-Cloud Computation Offloading for Deep Learning Services", accepted to 2020 IEEE GLOBECOM Workshop
6. M. Hosseinzadeh, A. Wachal, **H. Khamfroush**, D. Lucani, "Optimal Accuracy-Time Trade-off for Deep Learning Services in Edge Computing Systems", accepted for publication in IEEE ICC conference 2021.
7. **H. Khamfroush**, N. Hudson, S. Iloo, M. Rahnamay-Naeini, "Influence spread in two-layer interdependent networks: designed single layer or random two-layer initial spreaders?" accepted to Applied Network Science, May 2019.
8. U. Nakarmi, M. Naeini, **H. Khamfroush**, "Critical Component Analysis in Cascading Failures for Power Grids using Community Structures in Interaction Graphs," IEEE Transactions on network science and engineering, March 2019.

9. V. Farhadi, F. Mehmeti, T. La Porta, T. He, **H. Khamfroush**, S. Wang, K. Chan, “Service Placement and Request Scheduling for Data-intensive Applications in Edge Clouds,” IEEE INFOCOM 2019.

Up to 5 Other Products

1. N. Felemban, F. Mehmeti, **H. Khamfroush**, Z. Lu, S. Rallapalli, K.Chan, T. La Porta, “PicSys: Energy-Efficient Fast Image Search on Distributed Mobile Networks”, accepted to IEEE Transactions on Mobile Computing, Dec 2019.
2. **H. Khamfroush**, D. Lucani, P. Pahlevani, J. Barros, “On Optimal Policies for Network Coded Cooperation: Theory and Implementation”, IEEE Journal on Selected areas in communication (JSAC), 2015 [*IF*:7.172].
3. **H. Khamfroush**, N. Bartolini, T. La Porta, A. Swami, J. Dillman, On Propagation of Phenomena in Interdependent Networks, IEEE Transactions on Network Science and Engineering, in press (2016) [*IF*:2.47] [Listed as the top 50 most frequently accessed paper].
4. **H. Khamfroush**, D. Lucani, J. Barros, P. Pahlevani, Network-Coded Cooperation Over Time-Varying Channels, IEEE Transactions on communications, 2014 [*IF*:5.69].
5. D. Zad Tootaghaj, N. Bartolini, **H. Khamfroush**, T. La Porta, “On progressive network recovery from massive failures under uncertainty,” IEEE Transactions on network and service management, Nov. 2018 [*IF*: 4.682].

Synergistic Activities

- NSF proposal review panelist (3 times during 2020)
- Organizer and panelist of women in research panel at University of Kentucky, Fall 2020
- University of Kentucky ACM-W advisor
- Judge for the 4th Annual Commonwealth Computational Summit (CCS), University of Kentucky, Fall 2020
- Co-Chair of IEEE SmartGridComm workshop on “Edge computing for smart grids”, 2020
- Representative of CS department of UK at the engineering grand tour, spring 2020
- Publicity chair of IEEE ICDCS conference 2021
- Representative of CS department at the Girls STEM Splash for high school students
- Reviewer and TPC member for several IEEE conferences and Journals, such as IEEE INFOCOM 2021, 2020, IEEE GLOBECOM 2020, IEEE TON, ACM/IEEE SEC 2020