CURRICULUM VITAE

MINOO HOSSEINZADEH

CONTACT INFORMATION

Davis Marksbury Building, Net Science Lab, Lexington, KY, US

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EDUCATION

PhD in Computer Science — *Fall 2019-Present*
University of Kentucky, Lexington, KY, US
GPA: 4/4

M.Sc. in Information Technology – Computer Networks — *2014-2017*
Urmia University, Urmia, Iran
Thesis Title: Dissertation: Controller Placement in Dense Software-Defined Networks by Optimization and Heuristic Methods
GPA: 17.94/20 (4/4)

B.Sc. in Information Technology — *2008-2013*
University of Mazandaran, Babolsar, Iran
GPA: 15.68/20 (3.13/4)

RESEARCH EXPERIENCE

Research Project, PhD — *2019-now*
Optimal Resource Management in Edge-Intelligent Systems
Net-Science Lab, University of Kentucky, Computer Science Department

Thesis, Master of Science — *2016*
Controller Placement in Dense Software-Defined Networks by Optimization and Heuristic Methods,
Urmia University, Urmia, Iran

Final Project, Bachelor of Science Encrypting by DNA, — *2012*
Mazandaran University, Babolsar, Iran

TEACHING EXPERIENCE

Graduate Teaching Assistant — *8/2022—12/2022*, *8/2023-now*
Discrete Mathematics
The Department of Computer Science
University of Kentucky, US

Graduate Teaching Assistant — *1/2022—6/2022*
Introduction to Programming Using C++
The Department of Computer Science
University of Kentucky, US

Graduate Teaching Assistant — *8/2021—1/2022*
Discrete Mathematics
The Department of Computer Science
University of Kentucky, US

Graduate Teaching Assistant — *8/2019—1/2020*
Discrete Mathematics
The Department of Computer Science
University of Kentucky, US

Graduate Teaching Assistant *9/2016 – 3/2017*
Computer Architecture Course
The Department of Computer Engineering
Urmia University, Urmia, Iran

HONORS AND AWARDS

Awarded N2Women travel grant to present at N2Women Workshop, SIGCOMM, 2023. *2023*

Awarded NSF travel grant to attend PerCom, 2023. *2023*

Awarded NSF travel grant to attend INFOCOM, 2021. *2021*

Awarded NSF travel grant to attend 4th ACM/IEEE SEC, 2019. *2019*

Ranked 3rd in the class of 2016 – M.Sc. in Information Technology. Urmia University *2016*

Ranked 313rd among 11000 participants in national-wide university entrance exam for M.Sc. degree in Information Technology. *2014*

Ranked 1st in national-wide Islamic Azad University, Science and Research Branch entrance exam for M.Sc. degree in Computer Networks. *2014*

Ranked among top 2% of approximately 350,000 participants in the national-wide university entrance exam in Mathematics and Physics fields for B.Sc. degree. *2008*

PUBLICATIONS

Minoo Hosseinzadeh, Andrew Wachal, Hana Khamfroush, Daniel E. Lucani, "QoS-Aware Priority-Based Task Offloading for Deep Learning Services at the Edge", IEEE Consumer Communications & Networking Conference (CCNC), 2022.

Minoo Hosseinzadeh, Nathaniel Hudson, Sam Heshmati, Hana Khamfroush, "Communication-Loss Trade-Off in Federated Learning: A Distributed Client Selection Algorithm", IEEE Consumer Communications & Networking Conference (CCNC) Workshop SONATAI, 2022.

Minoo Hosseinzadeh, Nathaniel Hudson, Xiaobo Zhao, Hana Khamfroush, Daniel E. Lucani, "Joint Compression and Offloading Decisions for Deep Learning Services in 3-Tier Edge Systems", IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN), 2021 (Invited Paper).

Minoo Hosseinzadeh, Andrew Wachal, Hana Khamfroush, Daniel E. Lucani, "Optimal Task Offloading For Deep Learning Services In Edge-enabled Systems: An Accuracy-Time Trade-off", To be published on ACM SIGCOMM Conference, N2Women Workshop, 2021.

Nathaniel Hudson, Jakir Hossain, **Minoo Hosseinzadeh**, Hana Khamfroush, Mahshid Rahnamay-Naeini, and Nasir Ghani, "A Framework for Edge Intelligent Smart Distribution Grids via Federated Learning", IEEE ICCCN, 2021 (Invited Paper).

Minoo Hosseinzadeh, Andrew Wachal, Hana Khamfroush, Daniel E. Lucani, "Optimal Accuracy-Time Trade-off for Deep Learning Services in Edge Computing Systems", IEEE International Conference on Communications (ICC), 2021 (https://arxiv.org/pdf/2011.08381.pdf).

Xiaobo Zhao, **Minoo Hosseinzadeh**, Nathaniel Hudson, Hana Khamfroush, Daniel E. Lucani, "Improving Accuracy-Latency Trade-off of Edge-Cloud Computation Offloading for Deep Learning Services", To be published on IEEE Globecom Workshops: IEEE GLOBECOM 2020 Workshop on Edge Learning over 5G Networks and Beyond, 2020.

Adetola Adeniran, Md Abul Hasnat, **Minoo Hosseinzadeh**, Hana Khamfroush, Mahshid Naeini, "Edge Layer Design and Optimization for Smart Grids", To be published on IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids (SmartGridComm) - Workshop on Edge Computing for Smart Grids, 2020.

Nasrin Seifi, **Minoo Hosseinzadeh**, Behdis Eslamnour, "Improving QoS in Mobile Software-Defined Networks by Predicting Access Points," In Proceedings of 2020 Vision, 2016, https://www.civilica.com/Paper-EECIT01-EECIT01_058.html (In Persian).

Minoo Hosseinzadeh, Behdis Eslamnour, Saleh Yousefi, "Controller Placement in Software-Defined Networks by Optimization," In Proceedings of the 2nd National Conference on Distributed Computing and Big Data Processing, 2016, Iran, West Azerbaijan, 2016 (In Persian).

Aditya Kaushal Ranjan, Raja Ali, Vijay Kumar, **Minoo Hosseinzadeh**, "Boolean Signatures for Metamorphic Malware", Procedia Computer Science 78(C):255-262, April 2016. DOI: 10.1016/j.procs.2016.02.041 - License: CC BY-NC-ND 4.0 – Published by Indian Conferences 2014.

PRESENTATIONS

"QoS-Aware Priority-Based Task Offloading for Deep Learning Services at the Edge", IEEE Consumer Communications & Networking Conference (CCNC), 2022. *2022*

"Communication-Loss Trade-Off in Federated Learning: A Distributed Client Selection Algorithm", IEEE Consumer Communications & Networking Conference (CCNC) Workshop SONATAI, 2022. *2022*

"Optimal Accuracy-Time Trade-off for Deep Learning Services in Edge Computing Systems", IEEE International Conference on Communications (ICC), 2021. *2021*

"Optimal Accuracy-Time Trade-off for Deep Learning Services in Edge Computing Systems", The 4th Annual Commonwealth Computational Summit at University of Kentucky, October 12-16, 2020 (Awarded 6th in eight best papers). *2020*

"Reliable and Efficient Mobile Edge Computing for Dynamic IoT Systems", PhD Forum of The Fourth ACM/IEEE Symposium on Edge Computing, Washington DC, November 7-9, 2019. *2019*

"Controller Placement in Software-Defined Networks by Optimization", The 2nd National Conference on Distributed Computing and Big Data Processing, 2016, Shahid Madani University, Tabriz, Iran. *2019*

Workshop: *2019*
"SDN: From Concept to Implementation," The 2nd National Conference on Distributed Computing and Big Data Processing, 2016, Shahid Madani University, Tabriz, Iran.

SKILLS

Programming Languages:

Python, Matlab, C#, C/C++.

Databases:

MySQL, SQLlite.

Hardware:

Raspberry Pi, NVIDIA JETSON KIT, Arduino Uno and Nano.

Frameworks & APIs:

ASP.NET, PyTorch, Matplotlib, SciPy/NumPy.

EXPERIENCE

Innovation Deparment Intern 6/2023 – 8/2023

Schneider Electric Company.

https://www.se.com/

AI Intern DIANTHUS Company. https://www.dianthuscommerce.com	6/2022 – 8/2022
Research Assistant University of Kentucky, Net-Science lab. I work as an RA under supervision of Dr. Hana Khamfroush. http://www.cs.uky.edu/~khamfroush/	1/2020 - now
Teaching Assistant University of Kentucky, Computer Science Department. I served as a TA for Discrete Math and Introduction to Programming courses. I also taught Discrete Math by myself.	*8/2019 – 1/2020, and* 8/2021-12/2022 and 8/2023-now

SERVICES

President of Iranian Student Association at University of Kentucky (ISAUK).	2022-now
Secretary of Graduate Student Association for Computer Science (GSACS). association	2021-2022
Vice president of Iranian Student Association at University of Kentucky (ISAUK).	2021-2022
Reviewing paper for journals and conferences such as ICDCS and SMARTCOMP.	2021-now
Volunteer teaching at JCTC high school, Lexington, KY.	2021
Volunteer talk at University of Kentucky ACM-W association for undergraduate students.	2021

REFERENCES

Dr. Hana Khamfroush (Supervisor**)**
Assistant Professor
Department of Computer Science
University of Kentucky
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Dr. Daniel E. Lucani (Collaborator**)**
Assistant Professor
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Dr. Behdis Eslamnour (MSc Thesis Advisor)
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