Kaveh Vaezi

No. 4, Block 106, Bou Ali Complex, Sa'adat Abad, Tehran, Iran 0913-456-4404 k.vaezi@gmail.com

k.vaezi@ee.sharif.edu

Dear profs. and researchers in Computer Science section at IPM,

I am writing to express my sincere interest in a possible postdoctoral position in the CS team in IPM.

I received my Ph.D. and M.S. degrees from **Sharif University of Technology (SUT)**, Tehran, Iran, both under the supervision of **prof. Farid Ashtiani**. Also, I worked as a postdoctoral at **Bilkent university**, Ankara, Turkey under the supervision of **prof. Nail Akar** till Feb. 2022.

My research interests mostly include

- Performance analysis of communication networks
- 5G wireless networks and beyond
- Age of Information (AoI)
- Caching Systems

Also, I am well experienced in using

- Markov analysis, QBD-type Markov chains and its applications
- Markov Decision Processes (MDP) and its applications
- Queueing theory, queueing networks and its applications
- Statistical analysis,

and I am fairly familiar with

- Statistic Hybrid Systems (SHS), and
- Learning techniques.

Currently, I am working During my stay at Bilkent University, I worked on Age of Information (AoI) which is recently introduced to quantify the timeliness of status update systems. More specifically, I studied AoI in the cooperative networks as well as caching systems. I succeeded in publishing a paper to Wireless Networks, and submitting another one to IEEE Transactions on Mobile Computing. Also, as a visiting researcher during my PhD program, I spent 6 months at Bilkent university where I succeeded to publish a paper on analytical modeling of elastic optical links.

In my Ph.D. dissertation, I studied delay in cooperative networks from a MAC layer viewpoint, which resulted in three papers, two published and one is prepared to be submitted to IEEE Transactions on Mobile Computing. My M.S. thesis, obtained the pdf of SNR in a multi-hop cellular network, by modeling it as nested queueing networks. During my study in SUT, I was a member of WRL.

I would appreciate the opportunity to continue my research in your team. Since part of your research is on performance analysis and optimization in networks, I believe the nature of my research relates to the SC team in IPM. Plus, I am always enthusiastic to work on new subjects. I think my knowledge and experience surrounding performance analysis of wireless networks as well as my abilities in using Markov-related tools, queueing theory and learning techniques could aid in your research.

References:

Prof. Farid Ashtiani

No. 607, Dept. of Electrical Eng., Sharif University of Technology, Azadi Ave., Tehran, Iran

Phone: +98 (21) 6616-5924 Fax: +98 (21) 6616-5994 Email: <u>ashtianimt@sharif.ir</u>

Prof. Nail Akar

Electrical and Electronics Department, Bilkent University, Ankara Turkey, 06800

Phone: +90 (312) 2902337 Fax: +90 (312) 2664192

Email: <u>akar@ee.Bilkent.edu.tr</u>

Dr. Abolfazl Diyanat

Dept. of Computer Engineering, Iran University of Science and Technology, Tehran , Iran

Phone: +98 (21) 73225345 Email: <u>adiyanat@iust.ac.ir</u>

Dr. Reza Entezari Maleki

Dept. of Computer Engineering, Iran University of Science and Technology, Tehran, Iran

Phone: +98 (21) 73225313 Email: <u>entezari@iust.ac.ir</u>

Sincere Regards, Kaveh Vaezi