

Postdoctoral Research Fellow Position in AI4Networks Lab in School of Electrical and Computer Engineering The University of Oklahoma-Tulsa

Position Title:

Postdoctoral Research Fellow.

Description:

AI4Networks Lab @ the University of Oklahoma invites applications for a self-motivated and enthusiastic researcher who is either in the process of completing or have completed their Ph.D. preferably in Electrical and Computer Engineering or a highly related quantitative field. The position will provide the selected candidate an opportunity to play the key role in development of a world-class cellular testbed, TurboRAN, and leverage it for unprecedented cutting edge research on next generation AI Enabled Networks for 5th generation and beyond mobile cellular networks. The testbed is currently funded with a \$1 million grant from National Science Foundation. In addition, the selected candidate will have the opportunity to collaborate with researchers at the 5GIC in Surrey, UK and University of Glasgow, Scotland, as well as industry partners that include several leading telecom operators and vendors in the United States and Europe. Candidates aspiring to become independent research experts in the domain of next generation AI enabled Networks are encouraged to apply. The selected candidate will be offered a one-year full time position with renewable contract at the University of Oklahoma-Tulsa, with a competitive salary and benefits as per university policies. The selected candidate will be mentored by Dr. Ali Imran.

Job Description:

The selected candidate is expected to work on following research themes currently being pursued at the AI4Networks lab, including but not limited to:

- Development of <u>TurboRAN</u> testbed for enabling research on Proactive AI enabled SON and Control and Data plane split based next generation wireless networks.
- Artificial Intelligence (AI) based Network Automation and Optimization for 5G and beyond.
- Big Data analytics exploitation in wireless networks, using social and non-social data.
- Unconventional deployment architectures (aerial as well as terrestrial) to enable global cost-effective connectivity for H2H, H2M, D2D and IoT communication.

In addition to the above research themes, the selected candidate will be encouraged to come up with independent research ideas and collaborate with lab peers to publish in top-tier IEEE journals, transactions and magazines, as well as create intellectual property that is potentially patentable. The selected candidate will also have the opportunity to mentor graduate and post-graduate students working in the lab and collaborate with the internal and external partners participating in the development and commissioning of the TurboRAN testbed and associated research.



Applicant Qualifications:

- Completed or in the process of completing their Ph.D. in Electrical and Computer engineering or other highly relevant quantitative field.
- Experience of working with SDRs/wireless testbeds or relevant industry experience.
- Good publication track record with at least two published journal articles as first author in top tier IEEE journals.
- Excellent programming proficiency in MATLAB, R, Python or other scripting languages.
- Very good work ethics and excellent collaboration skills.

How to Apply:

Interested candidates are requested to email their academic CVs along with at least one publication sample and at least 3 references to Dr. Ali Imran (ali dot imran at ou.edu). Review of applications will begin immediately and will continue until the position is filled.

About AI4Networks Lab @ OU-Tulsa:

The Artificial Intelligence (AI) for Networks Laboratory at the University of Oklahoma-Tulsa, (AI4Networks Lab @ OU) is a research group focused on applied research for developing pragmatic solutions to make the future wireless networks more intelligent, self-organizing, low cost, and globally ubiquitous. The lab is headed by <u>Dr. Ali Imran</u>. AI4Networks lab is chartered to research, design and build networks for better human to human (H2H), human to machine (H2M), machine to machine (M2M), device to device (D2D) and Internet of things (IoT) connectivity. Current focus in AI4Networks is on following three main research thrusts:

- Artificial Intelligence (AI) based Self Organizing Networks for 5G and beyond.
- Big Data analytics for exploitation in wireless networks, using social and non-social data.
- Unconventional deployment architectures (aerial as well as terrestrial) to make connectivity globally affordable and ubiquitous for H2H, H2M, D2D and IoT.

Research being conducted at AI4Networks lab tackles real world problems faced by wireless industry and is supported by federal grants and several key players in wireless industry to transition our research output to practice. For more information about the research activities at AI4Networks lab, please visit http://ai4networks.com.

Got Questions or Queries? Email us at: ali.imran@ou.edu with subject 'Postdoctoral Position'