

NEC Laboratories Europe has an opening for a

## PhD Candidate / Early Stage Researcher

[ref: 1411-149-SDN]

in the field of computer networking. The work focuses on research and development, inside the CleanSky (<http://www.cleansky-itn.org/>) Initial Training Network (ITN) European project, of networking techniques for scalable high-performance data center network designs, for example for demanding next-generation cloud-based telecommunication systems. The candidate will investigate intra- and inter data center techniques for optimizing application performance, depending on workload profiles and dynamic application demands. The target is to develop new techniques that can improve performance for individual applications sharing a virtualized infrastructure, for example Information-Centric Networking as one element of a telecommunication carrier cloud system. The work objectives would include profiling application workloads and user demands, designing algorithms and network protocols for application-specific virtual network functions and their management for intra- and inter data center deployments. The research work will be carried out in an international team of researchers.

NEC Laboratories in Heidelberg (Germany) provides an excellent working environment supporting individual creativity as well as strong teamwork. (Initially), the position is limited to three years. The candidate will be offered the possibility to obtain a Ph.D. degree from Universität Göttingen, Germany (<http://www.uni-goettingen.de/>) and to spend two periods of 3 – 5 months each at other CleanSky partners. According Marie Curie fellowship rules, at the time of recruitment by a partner a qualified candidate (1) must not have a doctoral degree (2) must have less than 4 years of research/work experience since obtaining the degree which formally allows him/her to embark on a doctorate; (3) he/she must not have resided or carried out main activity in country applied for more than 12 months in the 3 years immediately prior to recruitment to this project. Please send applications by **December 31st, 2014** electronically via the applications web system <http://www.neclab.eu/staffapplication/> with reference to [1411-149-SDN].

Applicants are sought with experiences, skills and interest in the following areas:

- Network architecture and protocols
- Software-Defined Networking and Network (Functions) Virtualization
- Information-Centric Networking
- Programming proficiency in C/C++Familiarity with software development under Linux/FreeBSD
- Knowledge about or practical experience with data center networks is a plus

We are looking for individuals with a broad background in the areas of telecommunication and computer networks, and we expect a Master's degree in Electrical Engineering or Computer Science or equivalent professional experience. English is the working language in the Laboratories.

For questions, please contact:

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<http://www.neclab.eu/jobs.htm>

