

## Technische Universität Berlin - Next Generation Networks



The Chair "Next Generation Networks (NGN)" (also called Architektur der Vermittlungsknoten - AV in German) is lead by Prof Dr. Thomas Magedanz. This chair - founded in 2004 and funded by the Fraunhofer Gesellschaft - is part of the Institute for Telecommunication Systems within the Faculty of Electrical Engineering and Computer Science at the Technische Universität Berlin. AV maintains a strong cooperation with the Fraunhofer FOKUS competence center Next Generation Network Infrastructures (NGNI), which is also directed by Prof. Magedanz. AV performs applied

research and development activities in the field of converging service and network environments, looking for the migration from legacy telecommunication infrastructures towards integrated service environments on top of fixed and mobile Next Generation Networks (NGNs) and the emerging Future Internet (FI). The overall AV/NGNI research vision "NGN2FI Evolution" reflects these research activities. In this regard, AV scientists are active in various national (BMBF) and international (European Union) research projects (see research) related to Future Internet research in order to develop related software toolkits and testbed infrastructures for efficient proof of concept validation of innovative research ideas. In addition, AV presents lectures, seminars and project courses for Diploma, Master, and PhD students in the above mentioned fields (see teaching). International students are welcome. All courses are presented in English from SS 2011. This open position is related to the research area "Future Internet Testbeds and Tools": Have you ever attended a Chemistry class in school? Then you probably are familiar with the concept of a wearing a white coat and safety goggles while performing an experiment that was discussed beforehand. Research in the context of the Future Internet follows a similar line of action - although it's usually not necessary to wear protective clothes. In dedicated labs, so called testbeds, many different approaches are in the process of being developed. Since this particular research area is widely dispersed, starting with incremental evolutionary attempts onwards to complete revolutionary ideas for the Internet of the future any possible design is going to be considered. In order to evaluate new protocols and architectures, testbeds with a wide range of heterogeneous resources and variability in terms of size and complexity are needed. Since a single testbed can't offer every kind of resource, it is envisioned to interconnect all existing testbeds among each other. This would allow to perform Future Internet experiments in a world wide distributed fashion. Our Research Area Future Internet Testbeds and Tools is focused on cross-domain resource and infrastructure federation mechanisms that allow connectivity and interworking of heterogeneous resources across boundaries of administrative domains.

### Future Internet Testbeds & Tools Developer

Enhancing the FITeagle framework and connect it to the XiPi testbed portal.

City: Berlin; Starting Date: 01/07/13; Duration: 6 Monate; Renumeration: 10,98 EUR/h; Closing date: 15/07/13

**Task:** Developing a software module to extract information from Future Internet testbeds and to update the XiPi repository accordingly and enhance FITeagle.  
Also see [xipi.eu](http://xipi.eu) and [av.tu-berlin.de/fitt](http://av.tu-berlin.de/fitt)

**Qualifications:** Very good knowledge in developing Java applications. Experiences with test driven developments, maven, databases, and web services are welcome.

**What We Offer:** Work in hot research topics in the Future Internet field, integration in current European research projects, learn a lot about professional software development and maybe write your thesis afterwards at our department.

**Application:** We might also offer other positions and could extend the contract afterwards. Just contact us.

More information at <https://stellenticket.de/11110>  
Offer visible until 09/08/13

