# Research Assistant in Network Management and Cloud Computing

#### Saint Louis University Computer Science Department

#### Job Details

Physical Location: Saint Louis University, Saint Louis, MO, USA.

Contract Length: 6 or 12 months

Open Until Filled: Yes

Tentative Starting Date: September 14, 2017

Eligibility: Non US-citizens are eligible as long as they meet the visa requirements in line with

US immigration regulations.

## Job Description

Contributes to scientific research and software development efforts for projects in cloud computing and network management, in accordance with university policies, goals, and objectives; investigates and develops technical solutions to meet the research objectives; divides technical solutions into component-level features; assigns, monitors, and reviews component-level feature development, testing and integration tasks performed by team members; assists in technical report writing.

# Typical Duties and Responsibilities

The following are examples of typical duties. Other duties may be assigned.

- 1. Design and implementation of novel Software-Defined Networking solutions within the scope of the project.
- 2. Assists faculty researchers and other collaborators, or may act independently, in planning and designing research experiments.
- 3. Operates Linux-based software and networking equipment.
- 4. Performs simulations and (statistical) analyses, including selecting the appropriate analysis procedure, setting up data for analysis, judging validity and reliability of data, designing and writing programs to perform analyses, and producing written reports on the result of the analyses.
- 5. Presentation of project results to internal and external parties.
- 6. Engaged in writing of technical publications and reports.

- 7. May work in a team of other research assistants and collaborate with student employees.
- 8. Effectively uses available technology to facilitate the success of the project. Liaisons with other SLU departments, outside collaborators, and others to ensure success of project.

### Qualifications

To perform this job successfully, an individual must be able to perform each duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

- Bachelor degree in Computer Science or related discipline by the time of appointment (master or PhD is a plus)
- Good object oriented programming skills in Linux environments.
- Basic knowledge of computer networking.
- Knowledge of the principles and techniques of cloud computing, network management and software-defined networking.
- Good Organizational skills.
- Strong written and oral communication skills.

#### **Education and Experience**

Knowledge and hands-on experience with the following theories and technologies is not mandatory but will be considered as a plus:

- Hands on experience with SDN and cloud platforms, e.g., ONOS, ODL or OpenStack.
- Hands on experience with revision control systems e.g., git.
- Hands on experience with container systems, e.g., Docker or Kubernetes
- Experience with single-board computers such as Raspberry PI.
- Experience with mobile development platforms (Android or iOS)
- Knowledge of optimization theory
- Knowledge of control theory
- Knowledge of network security
- Knowledge of network measurement techniques

# How to Apply

Please email your resume with at least 2 references, your transcript and your publication list to espositof@slu.edu. The email should have the following subject:

"Visiting Researcher in Cloud Computing and Network Management at SLU".