

A graphic for "Summer of Networking" featuring a globe icon with network symbols and a sun-like glow.

## Summer of Networking

InCNTRE Internship program

## Indiana University Summer of Networking 2013

There are two essential elements to starting a successful career in data networking: real-world experience and hands-on training. InCNTRE's Summer of Networking internship program at IU Bloomington provides both in abundance.

Each day of the Summer of Networking includes participation in a real-world project (during the morning) and classroom instruction (during the afternoon) from IU's acclaimed network engineering and research staff. In addition to participation in projects and classroom instruction, students will collaboratively build and operate their own dorm room network.

### Dates

May 20 – July 26, 2013

### Application deadline

November 30th, 2012

### Application Requirements

To apply, please send the following to Alice Jackson at [summer@incntre.iu.edu](mailto:summer@incntre.iu.edu):

- Cover letter (include your project area preference)
- Resume
- Academic transcript (unofficial)
- Letter of recommendation from faculty, supervisors or IT staff members that will be submitted directly to us at [summer@incntre.iu.org](mailto:summer@incntre.iu.org) (two letters of recommendation preferred)

### Notification

Applicants will be notified in January 2013 as to the outcome of their application.

### Qualifications

- Undergraduate entering senior year, or graduate student working on their masters, in computer science or technical information science program
- Programming experience (C, Perl, Python, or Java)
- Faculty member recommendation
- Course in network protocols or familiarity with material at: [go.iu.edu/4oP](http://go.iu.edu/4oP)

### Award

Internship award consists of 10 weeks of dorm housing, with \$400 in campus food service which may be used at locations throughout campus, and a cash stipend of \$1600 to be paid out over the 10 week period.



## Projects Areas

Applicants are required to express an interest for one of the following three project areas. Multiple students will be assigned each project area, and will work collaboratively as a team to make a meaningful contribution.

### The Indiana University Global Network Operations Center

The IU Global NOC designs, operates, and monitors some of the fastest and most advanced networks on the planet. The Summer of Networking intern will help develop and improve the NOC software-based tools.

Skills Required: Perl, C, or Java programming in a Linux environment, basic Linux systems administration, and technical writing.

### Research Computing

The Summer of Networking intern will work with staff members responsible for maintaining the [Scholarly Data Archive](#) and other [research data storage resources](#) to develop and enhance software data management tools used by researchers across the university.

Skills required: Perl and shell programming in a Linux environment and comfortable working in a command line environment. C and C++ programming desired.

## Security

The Summer of Networking (SoN) intern will work with REN-ISAC staff to enhance tool capability, deployments, and utilization. The specific SoN project will be a variable combination of tool development, implementation, and case study, based on summer 2013 REN-ISAC priorities and capabilities and interests of the intern. Intern work outputs will be integrated into REN-ISAC production processes, and as appropriate, published open source.

The Research and Education Networking Information Sharing and Analysis Center (REN-ISAC) provides operational computer and network security services supporting the higher education community. The 360 member institutions include representation of higher education in the US, Canada, Australia, and New Zealand. Among its operations, REN-ISAC works with systems and partners to collect, process, and represent information concerning security threat. The information is used to remediate and mitigate threat in the education sector, and provide protections for REN-ISAC members. Tools that support these processes are developed in-house and adapted from open source projects. The (SoN) intern will work with REN-ISAC staff to enhance tool capability, deployments, and utilization. The specific SoN project will be a variable combination of tool development, implementation, and case study, based on summer 2013 REN-ISAC priorities and capabilities and interests of the intern. Intern work outputs will be integrated into REN-ISAC production processes, and as appropriate, published open source.

Skills required: Perl or python programming in a Linux environment, basic Linux systems administration, and technical writing.