

July 11, 2011

## **Internships in Data Visualization and Analysis** **College of Arts and Sciences, Seton Hall University**

### **Overview: Certificates in Data Visualization and Analysis**

In today's society, government, industry and many other institutions collect and analyze large amounts of data to further their goals, such as:

- Governments want to preserve homeland security and, therefore, study data on the activities of terrorist groups.
- Health and public administrators want to deliver health care efficiently to patients for whom they analyze data on patients' needs and the cost of health care.
- Marketing analysts study online social networks to provide the foundations for new marketing campaigns.
- Financial analysts want to understand the relationships among different stock prices and economic indicators.

To address these growing needs, the College of Arts and Sciences of Seton Hall University will soon offer undergraduate and graduate certificates in Data Visualization and Analysis. This relatively new discipline trains students to communicate information clearly and effectively through graphic depictions that stimulate and encourage viewer engagement. The students learn how to analyze and portray complex data in an attractive and vivid design format.

### **Services to be Provided by Data Visualization Interns**

Seton Hall students enrolled in the data visualization certification program will be available to work as interns for public and private agencies. They will assist the organizations in a variety of ways:

- **Prepare data:** Set up M.S. Excel and M.S. Access databases, prepare and input data.
- **Analyze data:** Use statistics, data mining and data visualizations to evaluate the data and make inferences.
- **Design visualizations:** Design compelling data visualizations in M.S. Excel and Tableau for presentation and study.

### **Background of Interns**

Interns may either be undergraduate, usually in their 3<sup>rd</sup> (junior) or 4<sup>th</sup> (senior) years, or graduate students. The students' educational backgrounds and interests may be diverse, such as business, social and natural sciences, mathematics, and psychology.

### **Terms of the Internship**

Interns are required to work a minimum of 150 hours. When school is in session, they usually work a minimum of 15 hours per week for at least 10 consecutive weeks. Other arrangements are possible depending on the schedule of the student. Students may also work full time when they do not attend

courses, such as during the summer.

### **How to Request an Intern**

Interested employers can list internship opportunities available in their agencies by posting them in a database that is maintained by Seton Hall University's Career Center, which can be accessed at: <http://www.shu.edu/offices/career-center/>. (The Career Center site links to the form for posting internships and to more detailed information about internships.) Students wanting to pursue an internship will then be able to browse the database of internships and respond to the postings. Employers will be notified of applications and may interview student intern applicants on- or off-campus. Internships may be paid or unpaid. Salaries are negotiated between the applicant and the employer without involvement of the university.

### **Conducting Internships**

For the student, the goal of the internships is to connect her or his academic preparation with hands-on learning and work experiences. At the beginning of the internship, the student develops a learning agreement with a faculty adviser. This learning agreement summarizes the skills to be practiced at the internship. The student will be expected to report about the experiences to the faculty adviser. But the faculty adviser is not involved in supervising the student at the work place. The employer is responsible for providing a qualified supervisor/mentor who will monitor and guide the student.

### **Time frame**

- **Launch of the certificates:** September 2012
- **First interns assigned:** May 2013

### **For more information on posting internships or requesting interns with skills beyond those listed, contact:**

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