

Internship proposal at Seven one Solution s.r.l. Napoli (Italy)

Description of **Seven One Solution s.r.l.**

Seven One Solution was established in June 2002, as a spin-off of the Rome branch offices of Enterasys Networks Inc., an American multinational company operating in the Enterprise Campus LAN Market.

As Representative of Enterasys, Seven One was involved in all the activities and duties of the company for the Italian market. With a continuous year by year growth, from 2002 to 2010, the overall revenues reached in 2011 more than 20 M€.

The product solution and portfolio has approached other markets and brands. Actually Seven One Solution operates in the Top Enterprise market as a system integrator of Networking and Security Solutions, designing and implementing:

- Complex Networking Infrastructures with Advanced Security Features
- Voice over IP Infrastructures
- Videosurveillance solutions
- Application security solutions for Vulnerability Management and Rule Compliance

- Network monitoring, traffic classification and QoE / QoS monitoring solutions

Currently Seven One Solution has about 60 employees. The headquarter is located in Rome, with branches in Milan and Naples. Located in the branch office of Naples, the R&D department is currently involved in researching and developing new methods to classify and monitor traffic flows in complex network environments, in order to evaluate the QoS and QoE obtained by specific applications.

ULg Contact:

Benoit Donnet

Local Contacts:

Walter de Donato, PhD

R&D Engineering Manager @ Seven One Solution s.r.l.

Via Fiumiciello, 7 - 80142 Napoli

Phone: +39 081 289 201 - Fax: +39 081 563 1820

Email: wdedonato@sevenone.it

WWW: <http://www.sevenone.it>

Riccardo de Petris

rdepetris@sevenone.it

Tel. 06 50918530

Fax. 06 50913036

Cell. 3351278817

Description of the work to be done

Since many years Seven One Solution develops (and adopts for its clients) several network monitoring and measurements tools to test and manage its networking solutions.

In line with the current R&D activities, the work to be done mainly consists ***in the design, development and testing of applications for traffic generation and performance measurement based on open source tools and enhanced with special network interface drivers in order to reach high performance. The applications may possibly be integrated with other performance monitoring and measurement tools such as network emulators.***

The main features of the application will be: high generation rates (up to 10Gbps), generation based on stochastic models as well as on prerecorded traffic traces, evaluation of QoS parameters.

Description of Naples (Italy)

Naples is the capital of Campania region and the third-largest city in Italy, after Rome and Milan, with about 960,000 (as of 2012) inhabitants. Between 4.1 and 4.4 million people live in the overall Naples metropolitan area, one of the largest European metro areas on the Mediterranean Sea.

Known for its rich history, art, culture, architecture, music, and gastronomy, Napoli has played an important role in the Italian peninsula and beyond for much of its existence, which began more than 2,800 years ago. Situated on the west coast of Italy by the Gulf of Napoli, the city is located halfway between two volcanic areas, Mount Vesuvius and the Phlegraean Fields. The historic city centre of Napoli is the largest in Europe, and is listed by UNESCO as a World Heritage Site. Over its rich history Napoli has been the capital of duchies, kingdoms, and one Empire, as well as a major cultural center (especially during the period of Renaissance humanism and in the 17th through 19th centuries).

From the economics point of view, Naples has the fourth-largest urban economy in Italy, after Milan, Rome and Turin. It is the world's 103rd-richest city by purchasing power, with an estimated 2008 GDP of \$51 billion, surpassing the economies of Prague and Copenhagen.