Sophia Antipolis: The “SYMANTEC GRADUATE FELLOWSHIP” awarded to Leyla Bilge, PhD student at Eurecom

Leyla BILGE is a PhD student in the Networks and Security Department at Eurecom, supervised by Davide Balzarotti

Interview with the winner by Eurecom.

Leyla Bilge-Yumer, you have just been awarded the “2011 Symantec Fellowship”, this is the first time this award has been given to a European student, previous winners were all from prestigious American Universities, can you tell us what this means to you?

“Having already had several publications selected for major international conferences, this gave me the opportunity to realise that my research works were interesting to the scientific community. However, this award focuses on practical developments directly related to my research. I am particularly proud to have been recognised by one of the most important companies in terms of IT security.”

Can you tell us more about your research works?

“I basically work on detecting highly advanced computer viruses called “Botnets” (or networks of robots) and examining how they work through the DNS, that is the systems that manage domain names. I have successfully developed several detection system prototypes for these viruses and I have just implemented a service called EXPOSURE (http://exposure.iseclab.org) which aims to identify and report the domain names involved in malicious activities. This service has attracted the attention of several manufacturers.”

Developing the emergence of new ideas, a priority focus for Symantec:
Symantec is one of the world’s leading suppliers of security and storage management solutions, and systems enabling individuals and companies to protect and manage their information. Through research programmes in partnership with academics, the manufacturer has set itself an important goal to promote the emergence of new ideas, develop innovation and produce the technologies of the future.

Marc Dacier, director of the Symantec Europe research laboratory tells us: “This prize is awarded after a very strict international selection process. We receive a large number of submissions from the most prestigious universities and we assess each one based not only on scientific criteria (number and quality of publications) but also in terms of the expected impact of the works studied. The process is extremely selective and those chosen truly represent the world’s very best PhD students of the moment. It is significant that previous years’ winners have also gone on to have particularly remarkable early careers.”

This is the 1st time this prize has been awarded outside the United States. Can you explain what has changed?
“Generally, French students complete their PhD thesis in shorter timeframes than their American counterparts (from 3 to 4 years as opposed to 5 to 6 years). They can however, devote themselves to
their work full time. But they cannot produce as many publications in this short period and consequently start with a slight disadvantage. This emphasises the quality of Leyla Bilge-Yumer’s submission even more. However, a PhD student, no matter how good, can only develop in the right environment. Leyla’s prize therefore also recognises EURECOM’s work in general and that of the networks and security department in particular. At Symantec, we can only be delighted with this. This shows that we made the right choice in establishing our research group in synergy with EURECOM.”

A graduate from the University of Bilkent, Ankara in Turkey, Leyla Bilge-Yumer is a PhD student at EURECOM supervised by Davide Balzarotti, EURECOM and Engin Kirda, Northeastern University.