

# SIGCOMM 2011 Education workshop

Education workshops were organised together with SIGCOMM 2002 and 2003. The 2002 education workshop was focused on undergraduate curriculum, laboratory courses and graduate curriculum. The 2003 education workshop was centered around three panels : networking education around the globe, graduate course and tips for networking educators. Since then, networking education has evolved with more textbooks and perhaps a better consensus on the contents of a first networking course. However, there are still many educational issues that would be worthwhile to discuss within the SIGCOMM community, and more broadly in the networking community.

Our objective with the 2011 Education workshop is to allow junior and senior educators to discuss, exchange ideas and propose recommendations to the community. The workshop will be organised as a set of panels and breakout sessions during which we will discuss about several important education issues including but not limited to :

- **New ways to teach a first (undergraduate) networking course.** Most networking textbooks nowadays focus on the TCP/IP protocol suite and Local Area Networks. Is it still the best approach ? Are there other ways to organise a first networking course ? How should wireless and security be included a first networking course ? What about sensor networks or public wireless data networks (3G, LTE, ...) ?
- **Tools for networking courses.** Some networking courses rely heavily on mathematical models and techniques, while others use simulation, emulation, network lab setups with “real: routers, switches and end systems; or prototype deployments in testbeds or on PlanetLab. What are the best practices to include such techniques in a networking course ?
- **Graduate networking courses.** Graduate networking courses are often organised around a set of papers that are read by students, discussed and sometimes presented during the course. Are there an emerging set of core principles that should be taught in a graduate networking course, e.g., as in done in first-year graduate-level courses in architecture, operating systems, or AI?
- **Interdisciplinary networking courses.** Networking has implications beyond the traditional EE and CS curricula. On one hand, networking students need to take into account legal, economic, social or environmental issues that affect networks. On the other hand, students in other fields need to learn more about networking. How should such interdisciplinary courses be organised. What are the best

practices that work ?

The workshop solicits position papers on the above topics. The position papers will be collected on [education.sigcomm.org](http://education.sigcomm.org) and discussed through the education web site before the workshop to finalise the programme. The workshop programme will contain both panels and breakout sessions to foster discussions among educators and poster/ demo sessions.

### **Instructions for Authors**

A position paper should be no greater than 6 pages in length including all figures, tables, references, appendices, etc., and must be posted on [education.sigcomm.org](http://education.sigcomm.org) as a PDF file of less than 10 MBytes. Authors are encouraged to provide links to additional material (e.g. slides, lab assignments, source code, ...) in their position papers. For additional information, can be obtained from <http://education.sigcomm.org> or by contacting one of the workshop co-chairs.

### **Important dates**

Position paper submission	Friday March 11th, 2011 23:59:59 PDT
Final workshop programme	June 1st, 2010
Workshop date	Monday August 15th, 2011

A workshop report will be produced. The report will summarise the position papers received and the breakout sessions and panels. This report will be posted on the SIGCOMM education website and a summary will be submitted to SIGCOMM Computer Communication Review.

### **Workshop co-chairs**

Olivier Bonaventure, UCLouvain, Belgium  
David Wetherall, University of Washington, USA

### **Workshop organisers**

Dah Ming Chiu, Chinese University of Hong Kong, Hong Kong  
Giseppe Di Battista, Universita' Roma Tre, Italy  
Tristan Henderson, University of St Andrews, UK  
Sanjay Jha, University of New South Wales, Australia  
Jim Kurose, University of Massachusetts USA

Nick McKeown, Stanford University, USA  
Laurent Toutain, Telecom-Bretagne, France