The JTG / IEEE IT Society Summer School

in
Signal Processing, Communications, and Networking
Summer school format

- Four days, two topics
- Each topic, each day: Two hours lecture + one hour discussion
- Student research presentations in discussion sessions
- Advanced, intense, primarily aimed at research students
- Material for 2009 - 2014 available on the web
  - http://www.ee.iitm.ac.in/jtgsummerschool/
Past Summer Schools

• 2008 (Experimental, Zeroth), IIT Madras
  – Multiterminal information theory Rajesh Sundaresan
  – Network coding Andrew Thangaraj and Srikrishna Bhashyam

• 2009 (First), IISc Bangalore
  – New paradigms in processing large data sets Ravi Kannan and Amit Deshpande
  – Function computation D.Manjunath

• 2010 (Second), IISc Bangalore
  – Physical layer security Matthieu Bloch
  – Markov renewal processes and mean-field limits Anurag Kumar

• 2011 (Third): IIT Bombay
  – Statistical recovery problems in high dimensions Martin Wainwright
  – Optimising performance of wireless networks Prasanna Chaporkar

• 2012 (Fourth): IIT Bombay
  – Games and mechanisms for communication systems Bruce Hajek
  – Communication complexity Jaikumar Radhakrishnan

• 2013 (Fifth): IIT Madras
  – Random matrix theory and wireless networks Giuseppe Caire
  – Stochastic geometry for wireless networks Srikanth Iyer

• 2014 (Sixth): IIT Madras
  – Statistical physics methods in coding/info theory Pascal Vontobel
  – Mesoscopic perspective on network dynamics Sitabhra Sinha
JTG Summer School 2014

• Registration: INR 1000 (USD 20) students, INR 2000 others

• Participant profile: 95 registrations, well-attended
  – Students 75, Faculty 17, Others 3 (industry, research organisations)
  – Students mostly from IIT Bombay, IIT Madras, IISc, some from IIT Kanpur/Hyd, other engineering colleges.
  – One foreign participant (CUHK) apart from a speaker
  – 8 students talks of ½ hour each

• Sponsors:
  – IEEE Information Theory Society  INR 6,00,000 = USD 10,000
  – COMSNETS Association  INR 50,000
  – Microsoft Research India  INR 50,000
  – Qualcomm  INR 50,000
  – Registration  INR 1,10,000

• Money used for air travel of foreign speaker, students travel, boarding and lodging, speakers honorarium, printed material, registration kits, transportation.

• Local organisation:
  – Andrew Thangaraj, Srikrishna Bhashyam, Radha Krishna Ganti, Krishna Jagannathan
Group Picture: Summer School 2014
Speaker Pictures: Summer School 2014
Plan for 2015

• Our summer school has found traction – seven years in a row. Maintain the momentum.

• 2015 plans: IISc Bangalore June/July 2015
  – High dimensional statistics – Yihong Wu
  – Multiterminal communication theory – Gerhard Kramer

• Timing: May/June/July, depending on anticipated local climate conditions, ISIT, ICC, WiOpt timings

• Organising committee: Chooses venue, topics, speakers
  – Srikrishna Bhashyam, Radhakrishna Ganti, Krishna Jagannathan, Andrew Thangaraj (IIT Madras)
  – Rajesh Sundaresan, Navin Kashyap (IISc)
  – Vinod Prabhakaran (TIFR Mumbai), Sibiraj Bhaskaran Pillai (IIT Bombay)

• Advisory group: JTG National Coordinator, IT Society President, Prakash Narayan, B. Sundar Rajan, P. Vijay Kumar, Vivek S. Borkar
  – Utter words of wisdom when requested
Budget for 2015 (in INR)

- Speaker travel: 300,000
- Honoraria: 100,000
- Speaker accommodations: 100,000
- Others accommodations: 200,000
- Food: 300,000
- Arrangements, stationery: 300,000

- Total: Rs. 1,300,000 ~ $ 21,666

- Balance will be covered by registrations, local funding agencies (COMSNETS, Qualcomm, Microsoft Research).