

SRIF13 Chairs' Welcome

It is our great pleasure to welcome you to the exciting City of Hong Kong to attend the SRIF 2013 Workshop, the 2nd Software Radio Implementation Forum. SRIF aims at bringing together practitioners and researchers of software-defined radio in academia and industry to share the latest development, experiences, and insights, in this exciting area. Through the exchange, the workshop aims to encourage and engender lively collaborations between academia and industry. In particular, the workshop aims to (i) reach out to industrial participants to share their best practices; and (ii) expose the state-of-the-art wireless research based on SDR to industrial participants in order to seek feedback.

Although the idea of Software Defined Radio (SDR) was conceived 20 years ago, it remains today one of the most vigorous and growing research areas in wireless communications. On the one hand, the cost of radio components, chipset, and platforms with programmable features is now almost within reach of integration into consumer products. On the other hand, the very definition of Software Defined Radio has been significantly extended since its inception: from “just” reshaping of PHY waveforms to full reconfiguration of the whole protocol stack as well as virtualization of PHY/MAC/access functionalities. There has also been increased interest to explore ways to describe the radio behavior through application programming interfaces and languages independent of the underlying platform.

This year's program features a rich and well assembled mix of contributions, covering a broad range of new solutions and platforms, and fresh algorithmic and experimental insights. On the GNU Radio front, there is a new implementation of 20 MHz 802.11a/g/p OFDM receiver, and a paper on the use of ControlPort and Performance Counters to inspect application. Meanwhile, a real-time Physical-Layer Network Coding system has been implemented on USRP/GNU Radio, and asynchronous rendezvous protocols have been implemented on Microsoft Sora. Overall, the contributions span from new capabilities and extensions in software-defined radio platforms to many novel applications and implementations on them.

After a thorough review process, with each paper assigned to at least three independent technical program committee members for review, and with three papers further assigned to a shepherd after the initial review phase, 6 full papers and 7 short papers have been selected for presentation. These papers are authored by researchers spanning three continents (from USA, China, Korea, Sweden, Austria, Germany). The program is complemented by an invited talk and three compelling live demonstrations to be showcased during the workshop.

Organizing a workshop is a substantial undertaking, and it is a team effort. We are deeply thankful to all the Technical Program Committee members for their outstanding review work. We warmly thank the Sigcomm Web Chair, Zihui Ge, for having set up the web site and having promptly responded to all our requests. Our sincere gratitude goes to the SRIF Steering committee, Li Erran Li, Soung Chang Liew, Tom Rondeau, and Kun Tan, for having put their trust in our hands, and for having provided us with invaluable feedbacks. And, finally, special thanks are due to the Sigcomm Workshop Chairs, Aditya Akella and Ratul Mahajan, for their continuous support and assistance, to Lizhao You for setting up managing the paper submission website, and to Lisa Tolles for the proceedings service and her patience.

But the final thanks goes to the contributing authors, for having submitted their best works: without you, this workshop would not exist!

General Chair
Soung Chang Liew

Technical Co-Chairs
Giuseppe Bianchi, Petri Mähönen, Kun Tan