Around the Puget Sound, Seattle, Washington, U.S.A

Wifi | Whitespace | Wireless Mikes
Can they coexist?

Presented by
Ranveer Chandra (Microsoft Research) & George Nychis (CMU)

Tuesday, October 11, 7:30pm
Microsoft Research
Building 99, Redmond

...directions and maps

The TV white spaces offer an exciting opportunity for increasing spectrum availability by reusing spectrum not in active use by TVs and wireless mics. While it is simpler to detect TV transmissions, either using sensing or through the whitespace database, the detection of wireless mics is particularly challenging. Their use is dynamic and, furthermore, mic receivers are receive-only devices. For this reason the FCC has made very conservative rules that require white space devices (WSDs) to vacate any TV channel that is in use by a mic. We have been investigating this coexistence problem for over two years. Through a unique setup involving a faraday cage, an anechoic chamber, and white space devices, we characterize the impact of transmissions from WSDs on the audio recording of a wireless mic. We also present SEISMIC, a system that enables WSDs and mics to operate on the same TV channel with zero audible mic interference.

Joint work with: George Nychis, Thomas Moscibroda, and Ivan Tashev

Presenters

Ranveer Chandra is a Senior Researcher in the Mobile Computing Research Center at Microsoft Research. His research is focused on systems issues in computer networks. As part of his doctoral dissertation, Ranveer developed VirtualWiFi. The software has been downloaded more than 150,000 times and is among the top 5 downloaded software released by Microsoft Research. It is also shipping as a feature in Windows 7. Among several other projects, Ranveer is co-leading the white space networking project at Microsoft Research. He was invited to the FCC to present his work and spectrum regulators from India, China, Brazil, Singapore and US (including the FCC chairman) have visited the Microsoft campus to see his deployment of the world's first urban white space network. Ranveer has published more than 35 papers, and filed over 40 patents, 12 of which have been granted. His research has been cited by the popular press, such as CNET, MIT Technology Review, Scientific American, New York Times, WSJ, among others. He has won several awards, including best paper awards at ACM CoNext 2008 and ACM SIGCOMM 2009, the Microsoft Research Graduate Fellowship, the Microsoft Gold Star Award and the MIT Technology Review's Top Innovators Under 35, TR35 (2010). Ranveer has an undergraduate degree from IIT Kharagpur, India and a PhD from Cornell University.
Website

George Nychis is a graduate student at Carnegie Mellon University pursuing his Ph.D. in Electrical and Computer Engineering. He received his M.S. from Carnegie Mellon University, and his B.S. in Computer Science from the University of Pittsburgh. George's research interest is in the field of networking, with a focus on wireless networking. Currently, his research is addressing problems in the coexistence of heterogeneous wireless networks and devices.

Audio Engineering Society where audio comes alive!
AES Audio Engineering Society - Pacific Northwest Section
Around the Puget Sound, Seattle, Washington, U.S.A

Bill Putnam
—
His Work and His Legacy
Presented By
Bob Bushnell and Jerry Ferree

Tuesday, October 4, 2011
Shoreline Community College, Rm 818

directions and maps

Our October 4th meeting is an insider's look at the recording business in its heyday: 1950 to 1975 by two old timers who were there to be a part of it. They both worked their way up from the bottom, working alongside an industry giant: Bill Putnam.

Putnam was an engineer's engineer, skilled in acoustics, electronics, and an accomplished mixing engineer as well. He started Universal Recording in Chicago, and then moved to the west coast where he started United Recording in Hollywood. Along the way, because the specialized electronics needed by studios weren't generally available, he started a company to design and manufacture those products. That company eventually became known as UREI: United Recording Electronics Inc.

Our presenters for the evening will indulge us with an audio tag-team match, telling stories and answering questions. They have written a book about their experiences, and will have the book on hand for sale.

Our Presenters

Bob Bushnell began his career in recording with Bill Putnam when monaural was the only choice. Digital was ten fingers. He ended his career when digital editing and computer use was commonplace. In his years of working with Bill, he became good friends with this master of the art of recording, culminating when Bill passed on in 1989. Many of the lessons he learned from Bill helped Bob in later years.

Jerry Ferree has been interested in all things electrical most of his life. He was especially fascinated with the idea of recording on disk and later on 1/4-inch tape. By 1956, he had met Bill Putnam who hired him, when he graduated, as a technical maintenance engineer at Universal Recording Corporation in Chicago. A few years later, he moved to Hollywood, CA as part of Bill's team to build a new and innovative recording studio, United Recording Corporation (now owned by Allen Sides). It was there that he met Bob.