Panel: Enabling Technologies and Standards for Spectrum Forensics

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Forensic science
• The application of scientific principles and technological practices to the purposes of justice in the study and resolution of criminal, civil, and regulation issues (American Academy of Forensic Sciences, http://www.aafs.org)

Spectrum forensics
• Spectrum measurements that support interference monitoring, investigation, and enforcement

  • The gathering of information by a trusted agent, using rigorous, repeatable, scientific engineering methods, to inform an enforcement action
What *technologies* can address the challenges of enforcement?

- Intermittent, bursty interferers
- Mobile interferers
- Multipath and its effect on direction-finding
- Direction-finding on frequencies with multiple signals
- Automating the monitoring process
- Improving sensitivity
- Classifying digital signals

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How do we *standardize* collection gathering?

- Framework
- Metrics
- Best practices
“We’d now like to open the floor to shorter speeches disguised as questions.”
Discussion

• Dedicated vs. embedded sensors
• Software-defined vs. software-controlled sensors
• What should go on the cloud, and what should stay at the sensor?
• Feedback to policy-makers? the other panels?
Demos

• Rohde & Schwarz
• Great Scott Gadgets
• DARPA Radio Map
• University of Colorado Drones
• Cognitive Systems Corp.
• iPosi
• CAC Spectrum Monitoring
• CRC Spectrum Monitoring

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