

Fusing Academia and Industry

How academia can be more closely engaged with industry in advanced security technology development

Mike Ellenbogen

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Agenda

- Innovation in Security
- Making the Overall System Smarter
- Beyond Sensor Fusion: Adding Intelligence
 - TSA Risk Based Screening
 - ROW will follow
 - Improve the Screening Process
 - Increase Pd While Facilitating the Process and Lowering Overall Costs
- How Can Academia Work More Closely with Industry?

Innovation - Academia and Industry

- Difference Between Product Development and “Big R” Research
- Industry is Hungry for New Ideas
 - New Ideas Should Significantly Enhance Product Performance or Open a New Market
- Understand the Goal!
 - Industry’s goal is (usually) to build a product, not just to progress to the next research phase
- Understand Your Role
 - What do you bring to the table?
 - What piece of the puzzle are you contributing to?
- Set your goals to solve big problems, not just to publish
 - What’s the impact of the problem you’re trying to solve?

Product Development With Academia – What’s Hard?

- Understand the Critical Path
 - Stay Off It!
 - Understand it’s a deliverable at a specific time
- It’s not the Money... It’s the Time
 - Sometimes it’s just easier to pay for it
- Academia
 - Hypothesis, Research, Peer Review, Publish.
 - Conflicts with “Agile Research” approach

Product Development With Academia – What's Hard?

- Publish and Perish
 - Industry usually doesn't want you to publish all your work!
- Intellectual Property
 - Always an issue. Who owns what?
 - Your favorite published paper just gave away the core IP...
 - File Patent(s) or Provisionals BEFORE Publishing Your Work
- Licensing Offices
 - Be Clear, PLEASE!!!
 - Every negotiation shouldn't be a new thesis project

“Selling” to Industry

- Who Decides Whether to Work with Academia?
 - CEO? CTO? VP Eng? Program Manager?
 - Whose Vision Is It?
- Why Bring in Academia?
 - “Big R” Research
 - Government Funding?
 - Are You Smarter Than the Other Guys?
- What are the Alternatives?
 - Consultants
 - Other Industry Partners / Developers
- What’s the Benefit?
- Why is *This Time* Going to be Different?

Recommendations

- Know What You're "Selling"
- Big R - Opportunities Further Out in Time
 - Ideal for Industry / Academic Partnership
 - Moves More Slowly Than Product Development
 - Room for Big Ideas and Big Mistakes
- Find a Champion Within The Partner Company
- Help Sell the Vision – What COULD Be!

Thank You

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