

# Ryan Sheatsley

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## Academic & Professional Experience

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<b>United States Army Research Laboratory</b> <i>Research Scientist and Team Lead (mentored by Andrew Toth)</i>	<b>Adelphi, MD</b> <i>Summers of 2014–2018</i>
<b>Patent Litigation</b> <i>Code Review &amp; Document Drafting</i>	<b>University Park, PA</b> <i>2018–2019</i>
<b>Systems Internet and Infrastructure Security Laboratory</b> <i>Systems Administrator</i>	<b>University Park, PA</b> <i>2015–Present</i>
<b>Penn State Learning Center</b> <i>Writing Tutor (mentored by Dr. Jon Olson)</i>	<b>University Park, PA</b> <i>2012–2013</i>

## Education

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<b>Pennsylvania State University</b> <i>M.S. in Computer Science and Engineering</i> <ul style="list-style-type: none"><li>○ Thesis: <i>Adversarial Examples in Constrained Domains</i></li><li>○ Advisor: <i>Prof. Patrick McDaniel</i></li><li>○ Thesis committee: <i>Prof. Patrick McDaniel, Prof. Trent Jaeger, Prof. Nicolas Papernot</i></li></ul>	<b>University Park, PA</b> <i>2016–2018</i>
<b>Pennsylvania State University</b> <i>B.S. in Computer Engineering</i>	<b>University Park, PA</b> <i>2011–2015</i>

## Publications

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### Conference Proceedings.....

**Development of Machine Learning Algorithms for Directional Gamma Ray Detection.** *Matt Durbin, Ryan Sheatsley, Christopher Balbier, Tristan Grieve, Patrick McDaniel, Azaree Lintereur.* Proceedings of the 60th Annual Meeting of the Institute of Nuclear Materials Management, Palm Springs, CA. (2019)

**Curie: Policy-based secure data exchange.** *Z. Berkay Celik, Abbas Acar, Hidayet Aksu, Ryan Sheatsley, Patrick McDaniel, A Secuk Uluagac.* Proceedings of the Ninth ACM Conference on Data and Application Security and Privacy (CODASPY), Richardson, TX. (2019)

**Network Traffic Obfuscation: An Adversarial Machine Learning Approach.** *Gunjan Verma, Ertugrul Ciftcioglu, Ryan Sheatsley, Kevin Chain, Lisa Scott.* Proceedings of the 2018 Military Communications Conference (MILCOM), Baltimore, MD. (2018)

**Detection under Privileged Information.** *Z. Berkay Celik, Patrick McDaniel, Rauf Izmailov, Nicolas Papernot, Ryan Sheatsley, Raquel Alvarez, Ananthram Swami.* Proceedings of the 2018 Asia Conference on Computer and Communications Security (ASIACCS), Incheon, Republic of Korea. (2018)

**Heterogeneous information sharing of sensor information in contested environments.** *Jason A Wampler, Chien Hsieh, Andrew Toth, Ryan Sheatsley.* Proceedings of Volume 10190 Ground/Air Multisensor Interoperability, Integration, and Networking for Persistent ISR VIII (SPIE), Anaheim, CA. (2017)

### Book Chapters.....

**Evading Machine Learning-based Network Intrusion Detection Systems with GANs.** *Bolor-Erdene Zolbayar, Ryan Sheatsley, Patrick McDaniel.* In: *Charles A Kamhoua, Christopher D. Kiekintveld, Fei Fang, Quanyan Zhu* (Ed.). *Game Theory and Machine Learning for Cyber Security.* John Wiley & Sons, Incorporated, Hoboken, New Jersey. (2021)

### Technical Reports.....

**A Vision Toward an Internet of Battlefield Things (IoBT): Autonomous Classifying Sensor Network.** *John Zhu, Egan McClave, Quan Pham, Sujay Polineni, Sam Reinhart, Ryan Sheatsley, Andrew Toth.* (2018)

**Cleverhans v2.0.0: an adversarial machine learning library.** *Nicolas Papernot, Ian Goodfellow, Ryan Sheatsley, Reuben Feinman, Patrick McDaniel.* (2016)

**Analyzing GAIAN Database (GaianDB) on a Tactical Network.** *Ryan Sheatsley, Andrew Toth.* (2015)

### Thesis.....

**Adversarial Examples in Constrained Domains.** *Ryan Sheatsley.* (2018)

### Honors

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<b>Robert M. Owens Memorial Scholarship:</b> Pennsylvania State University	2017
<b>Pathways Internship Program:</b> United States Government	2015
<b>Peer Tutor Faculty Recommendation:</b> Pennsylvania State University	2011

### Professional Activities

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#### Reviewer.....

<b>DKE:</b> Data & Knowledge Engineering Journal	2020
<b>GLOBECOM:</b> IEEE Global Communications Conference	2019