



## Software Security, Protection, and Reverse Engineering Workshop (SSPREW-9) *In conjunction with the 35<sup>th</sup> Annual Computer Security Applications Conference*

9-10 December 2019

### Monday, December 9<sup>th</sup>, 8:30 a.m. - 4:30 p.m.

- 7:30 BREAKFAST
- 8:30 *Welcome*, Todd McDonald, General Chair
- 8:35 **Training Session** on Reverse Engineering with Binary Ninja (Jordan Wiens, Vector 35)
- 10:00 BREAK
- 10:30 **Training Session** on Reverse Engineering with Binary Ninja
- 12:00 LUNCH
- 1:30 **Training Session** on Reverse Engineering with Binary Ninja (Jordan Wiens, Vector 35)
- 3:00 BREAK
- 3:30 **Training Session** on Reverse Engineering with Binary Ninja
- 4:30 ADJOURN

### Tuesday, December 10<sup>th</sup>, 8:30 a.m. - 4:00 p.m.

- 7:30 BREAKFAST
- 8:30 *Welcome and Introductions*, Todd McDonald, General Chair
- 8:35 **Keynote Address: AI Security and Smart Asset Protection** -- Yuan Xiang Gu, Senior Technology Advisor, IRDETO
- 9:30 Paper: *Obfuscation: Where Are We in Anti-DSE Protections?* -- **Mathilde Ollivier**, Sébastien Bardin, Jean-Yves Marion and Richard Bonichon
- 10:00 BREAK
- 10:30 Talk: *A White-Box Implementation Based on the Decomposition of an S-box and the Affine Equivalence Problem*: **Sandra Rasoamiaramanana**
- 11:00 Paper: *Preventing Zero-Day Exploits of Memory Vulnerabilities with Guard Lines* -- Sterling Vinson, **Rachel Stonehirsch**, Joel Coffman and Jim Stevens
- 11:30 Paper: *Revealing Malicious Remote Engineering Attempts on Android Apps with Magic Numbers* -- Leonidas Vasileiadis, Mariano Ceccato and **Davide Corradini**
- 12:00 LUNCH
- 1:30 Talk: *Improving Stochastic Code Deobfuscation with S-Metaheuristics* -- Cauim de Souza Lima, **Richard Bonichon** and Sebastien Bardin
- 2:00 Paper: *A Case Against Indirect Jumps for Secure Programs* -- Alexandre Gonzalvez and Ronan Lashermes (**Olivier Decourbe**)
- 2:30 Paper: *Fine-Grained Static Detection of Obfuscation Transforms Using Ensemble-Learning and Semantic Reasoning* -- **Ramtime Tofighi Shirazi**, Irina Mariuca Asavoae and Philippe Elbaz-Vincent
- 3:00 BREAK
- 3:30 *Panel Discussion* – Trends in Software Protection Research and Industry
- 4:00 ADJOURN