

George Argyros

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<https://georgeargyros.github.io>

SUMMARY

Expert in security, formal methods, program analysis, and cryptography. Track record of creating innovative solutions to complex engineering problems. Ability to transform theoretical solutions into practical software implementations.

EDUCATION

PhD in Computer Science, 2012 - 2019

Columbia University, New York, NY

Thesis: *Symbolic Model Learning: New Algorithms and Applications*

M.Sc. in Computer Science, 2012 - 2014

Columbia University, New York, NY

GPA: 3.96/4.00

B.Sc. in Informatics and Telecommunications, 2006 - 2012

University of Athens, Athens, Greece

NOTABLE PROFESSIONAL EXPERIENCE

Junior Researcher - Contractor Sep. 2018 - Jun. 2019

Microsoft Research, Redmond, WA

Research Intern Feb. 2018 - May. 2018

Microsoft Research, Redmond, WA

Visiting Researcher Jan. 2014 - April. 2014

Haifa University, Haifa, Israel

Consultant Sep. 2010 - Sep. 2012

Cyber-Defense Agency, Department of Defense, Greece

NOTABLE PROJECTS

Active Learning for Security Testing: I conceived and led a project where we developed novel active learning algorithms for extracting formal models (symbolic automata and transducers) from systems using queries. Using our techniques, we have found over 30 security vulnerabilities in security critical products such as Web application firewalls and SSL/TLS libraries.

Web Application Cryptanalysis: I conceived and led a project evaluating the security of pseudorandom generators in PHP applications. I developed a number of practical cryptanalysis attacks which affected approximately 10% of Internet applications including large projects such as Wikipedia.

Breaking Location Privacy: As part of a team of five, I developed algorithmic attacks for precisely locating users in location-based proximity services. Our attacks affected many popular applications including Facebook, Foursquare and Tinder and resulted in a bug bounty award from Facebook.

TECHNICAL SKILLS

Programming Languages: C/C#, Python, Java, PHP, Latex, Bash.

Frameworks: Z3 SMT solver.