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RESEARCH INTERESTS

Security in distributed computing systems, web security and design, peer-to-peer technologies.

EDUCATION

2011: Ph.D. in Computer Science, University of Crete.
Thesis: *Modern Techniques for the Detection and Prevention of Web2.0 Attacks*
Advisor: Professor Evangelos P. Markatos.

2006: M.Sc. in Computer Science, University of Crete.
Thesis: *Using Unstructured Peer-to-Peer Systems as Denial of Service Attack Platforms*
Advisor: Professor Evangelos P. Markatos.

2004: B.Sc. in Physics, University of Athens.

Awards

XHUNTER. IOF Marie Curie Fellowship (FP7-PEOPLE-2010-IOF), 2012-2015.

Maria M. Manassaki Bequest Scholarship, University of Crete. Given to the two best Ph.D. students of the Computer Science Department, 2009-2010.

Microsoft Research Cambridge Ph.D. Scholarship Program Grant, **100,000 €** (2008-2011).

Graduate Research Fellowship, FORTH-ICS, Prof. Evangelos P. Markatos, 2005-2011.

Other

IPICS 2006 - Privacy Course: Intensive Program on Information and Communication Security. Attended the special course on privacy issues and anonymous systems. Leuven, Belgium, 2006.

CoreGrid SummerSchool: Introduction to GRID Technologies. Ecole Polytechnique (EPFL), Lausanne, Switzerland, 2005.

EMPLOYMENT

2012-Now: Network and Security Lab, Columbia University, Postdoctoral Research Scientist.

2005-2011: Distributed Computing Systems Laboratory, FORTH-ICS, Research Assistant.

August - October, 2007: Microsoft Research Cambridge, Research Intern.

2005-2007: Attica Media Group, Editor.

2003-2004: Liberis Media Group, IT.

2000-2002: Flash Multimedia (Flash.gr), Editor.

ACADEMIC EXPERIENCE

Teaching Assistant, University of Crete,
CS-345: Operating Systems,
Prof. Evangelos Markatos,
Fall 2009, Fall 2008 and Spring 2006.

Teaching Assistant, University of Crete,
CS-558: Internet Technologies,
Prof. Evangelos P. Markatos,
Spring 2009 and Spring 2007.

Teaching Assistant, University of Crete,
CS-459: Internet Measurements,
Prof. Evangelos P. Markatos,
Fall 2010.

Teaching Assistant, University of Crete,
CS-556: Distributed Systems,
Assistant Prof. Mema Roussopoulos,
Spring 2008.

Teaching Assistant, University of Crete,
CS-554: Peer-to-Peer Systems,
Assistant Prof. Mema Roussopoulos,
Fall 2007.

Teaching Assistant, University of Crete,
CS-555: Parallel Systems and Grids,
Prof. Evangelos P. Markatos,
Fall 2006.

Teaching Assistant, University of Crete,
CS-457: Introduction to Information Security Systems,
Dr. Haris Manifavas,
Fall 2005.

Teaching Assistant, University of Crete,
CS-255: Software Engineering Laboratory,
Associate Prof. Angelos Bilas,
Spring 2005.

Program Committees

AICSSA 2011 (Computer Networks and Security track).

Reviewer

ACNS 2012, COMNET 2011, ACNS 2011 ESORICS 2011, Global Internet 2011, ICT 2011, ISCC 2011, ACNS 2010, SECRIPT 2010, IET Information Security, ToN 2009, CCS 2009, EuroSec 2009, COMNET 2009, EC2ND 2008, USENIX Security 2007, ICDCS 2007, WISTP 2007, IS 2007, NDSS 2006.

PUBLICATIONS

Peer Reviewed/Journals

Andreas Sfakianakis, Elias Athanasopoulos, and Sotiris Ioannidis **CensMon: A Web Censorship Monitor**. In *Proceedings of the 1st USENIX Workshop on Free and Open Communications on the Internet (FOCI), co-located with USENIX Security*. San Francisco, CA, US, August 2011.

Demetris Antoniadis, Iasonas Polakis, Giorgos Kontaxis, Elias Athanasopoulos, Sotiris Ioannidis, Evangelos P. Markatos, and Thomas Karagiannis **we.b: The Web of Short URLs**. In *Proceedings of the 20th International World Wide Web Conference (WWW)*. Hyderabad, India, March 2011.

Andreas Makridakis, Elias Athanasopoulos, Spiros Antonatos, Demetres Antoniadis, Sotiris Ioannidis, and Evangelos P. Markatos. **Understanding the Behavior of Malicious Applications in Social Networks**. In *IEEE Network*.

Elias Athanasopoulos, Antonis Krithinakis, and Evangelos P. Markatos. **An Architecture For Enforcing JavaScript Randomization in Web2.0 Applications (short paper)**. In *Proceedings of the 13th Information Security Conference (ISC)*. Boca Raton, Florida, October 2010.

Alexandros Kapravelos, Iasonas Polakis, Elias Athanasopoulos, Sotiris Ioannidis, and Evangelos P. Markatos. **D(e|i)aling with VoIP: Robust Prevention of DIAL Attacks**. In *Proceedings of the 15th European Symposium on Research in Computer Security (ESORICS)*. Athens, Greece, September 2010.

Elias Athanasopoulos, Vasilis Pappas, Antonis Krithinakis, Spyros Ligouras, and Evangelos P. Markatos. **xJS: Practical XSS Prevention for Web Application Development**. In *Proceedings of the 1st USENIX Conference on Web Application Development (WebApps)*. June 2010, Boston, Massachusetts.

Antonis Krithinakis, Elias Athanasopoulos, and Evangelos P. Markatos. **Isolating JavaScript in Dynamic Code Environments**. In *Proceedings of the 1st Workshop on Analysis and Programming Languages for Web Applications and Cloud Applications (APLWACA), co-located with PLDI*. June 2010, Toronto, Canada.

Elias Athanasopoulos, Antonis Krithinakis, and Evangelos P. Markatos. **Hunting Cross-Site Scripting Attacks in the Network**. In *Proceedings of the 4th Workshop on Web 2.0 Security & Privacy (W2SP)*. May 2010, Oakland, California.

Elias Athanasopoulos, Vasilis Pappas, and Evangelos P. Markatos. **Code-Injection Attacks in Browsers Supporting Policies**. In *Proceedings of the Third Workshop on Web 2.0 Security & Privacy (W2SP)*. May 2009, Oakland, California.

Elias Athanasopoulos, Antonis Krithinakis, Georgios Kopidakis, Graeme Maxwell, Alistair Poustie, Bob Manning, Rod Webb, Martin Koyabe, Carla Di Cairano-Gilfedder. **WISDOM: Security-Aware Fibres**. In *Proceedings of the 2nd ACM European Workshop on System Security (EUROSEC)*. March 2009, Nuremberg, Germany.

Antonis Krithinakis, Lubomir Stroetmann, Elias Athanasopoulos, Georgios Kopidakis, Evangelos P. Markatos. **WSIM: A software platform to simulate all-optical security operations**. In *Proceedings of the 2nd European Conference on Computer Network Defense (EC2ND)*. December 2008, Dublin, Ireland.

Antonis Theocharides, Demetres Antoniadis, Michalis Polychronakis, Elias Athanasopoulos, and Evangelos P. Markatos. **Topnet: A Network-aware top(1)**. In *Proceedings of the 22nd USENIX Large Installation Systems Administration (LISA) Conference*. November 2008, San Diego, CA.

Elias Athanasopoulos, Andreas Makridakis, Spyros Antonatos, Demetres Antoniadis, Sotiris Ioannidis, Kostas G. Anagnostakis, and Evangelos P. Markatos. **Antisocial Networks: Turning a Social Network into a Botnet.** In *Proceedings of the 11th Information Security Conference (ISC 2008)*. September 2008, Taipei, Taiwan (accept. ratio: 23%).

Vasilis Pappas, Elias Athanasopoulos, Sotiris Ioannidis, and Evangelos P. Markatos. **Compromising Anonymity Using Packet Spinning** In *Proceedings of the 11th Information Security Conference (ISC 2008)*. September 2008, Taipei, Taiwan (accept. ratio: 23%).

Elias Athanasopoulos, Mema Roussopoulos, Kostas G. Anagnostakis, Evangelos P. Markatos. **GAS: Overloading a File Sharing Network as an Anonymizing System.** In *Proceedings of the 2nd International Workshop on Security (IWSEC 2007)*. October 2007, Nara, Japan (accept. ratio: 20%).

Nikos Nikiforakis, Andreas Makridakis, Elias Athanasopoulos, and Evangelos P. Markatos. **Alice, what did you do last time? Fighting Phishing Using Past Activity Tests.** In *Proceedings of the 3rd European Conference on Computer Network Defense (EC2ND)*. October 2007, Heraklion, Greece.

Elias Athanasopoulos and Spiros Antonatos. **Enhanced CAPTCHAs: Using Animation To Tell Humans And Computers Apart.** In *Proceedings of the 10th IFIP Open Conference on Communications and Multimedia Security (CMS'06)*. Heraklion, Crete (accept. ratio: 25%).

Elias Athanasopoulos, Kostas G. Anagnostakis and Evangelos P. Markatos. **Misusing Unstructured P2P Systems to Perform DoS Attacks: The Network that Never Forgets.** In *Proceedings of the 4th International Conference on Applied Cryptography and Network Security (ACNS'06)*. June 2006, Singapore (accept. ratio: 15%).

Charis Papadakis, Paraskevi Fragopoulou, Elias Athanasopoulos, Marios Dikaiakos, Alexandros Labrinidis, Evangelos Markatos. **A Feedback-based Approach to Reduce Duplicate Messages in Unstructured Peer-to-Peer Networks.** In *Proceedings of the CoreGRID Integration Workshop*. November 2005, Pisa, Italy.

Technical Reports

Elias Athanasopoulos, Vasilis Pappas, Spyros Ligouras, Evangelos P. Markatos, and Thomas Karagiannis. **xJS: Lightweight Cross-Site Scripting Prevention Using Isolation Operators.** Technical Report 400, FORTH-ICS, October 2009.

Alexandros Kapravelos, Iasonas Polakis, Elias Athanasopoulos, Sotiris Ioannidis, and Evangelos P. Markatos. **Digital is Calling the Analog: Robust Prevention of Dial Attacks.** Technical Report 399, FORTH-ICS, October 2009

T. Karagiannis, E. Athanasopoulos, C. Gkantsidis, P. Key. **HomeMaestro: Order from Chaos in Home Networks.** MSR-TR-2008-84.

Other

Elias Athanasopoulos. **Modern Techniques for the Detection and Prevention of Web2.0 Attacks.** May 2011. Ph.D. Thesis.

Elias Athanasopoulos. **Using Unstructured Peer-to-Peer Systems as Denial of Service Attack Platforms.** November 2006. M.Sc. Thesis.

Physics

ruby-root: Extending ROOT's functionality with a Ruby interpreter interface: Elias Athanasopoulos, Diploma Thesis. Supervisor: Dr. George Tzanakos.

NuMI-Note-COMP-992, 2003-11-18: MINOS 4 Plane Prototype Offline Analysis Framework. (*Costas Andreopoulos, Elias Athanasopoulos, Bruce Baller, Albero Marchionni and George Tzanakos*)

NuMI-Note-COMP-993, 2003-11-18: Spatial Tessellation Techniques for the MINOS Magnetic Field (*Costas Andreopoulos, Elias Athanasopoulos and George Tzanakos*)

PROJECTS

HomeMaestro: A distributed system for the monitoring and instrumentation of home networks. <http://research.microsoft.com/~thomkar/HomeMaestro.aspx>

WISDOM: FP6 funded project by EU in optical firewalls (2006-2009). <http://www.ist-wisdom.org/>

ROOT Ruby Module: Ruby interpreter interface for the ROOT framework. <http://root.cern.ch>

binutils: Contribution in the GNU binutils project. <http://www.gnu.org/software/binutils/>

Gnewtellium: Full featured Gnutella server for the Unix platform. <http://gnewtellium.sf.net/>

REFERENCES

Available upon request.