Assc. Prof. Xenofontas Dimitropoulos

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Education

8/2002-7/2006

PhD, Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta.

GPA: 3.92/4,

Thesis title: "Measuring and Modeling Internet Routing for Realistic Simulations"

Advisor: George Riley

PhD Committee: KC Claffy, Nick Feamster, John Copeland, Henry Owen, Doug Blough

8/2001-7/2002

MSc, Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta.

10/1997-6/2001

BS. Physics, Aristotle University of Thessaloniki, Greece.

GPA: 8.8/10 (highest graduation GPA)

Employment History

3/2019-present

Associate Professor

University of Crete (UoC), Computer Science Department, Heraklion, Greece

Teaching two undergraduate and one post-graduate course with an average attendance of more than 150 students per year in total. Serving in a number of departmental and institutional committees.

1/2014-present

Affiliated Researcher and Group Leader

Foundation for Research and Technology – Hellas (FORTH), Institute of Computer Science, Heraklion, Greece

Leading the Internet Security Privacy, and Intelligence Research (INSPIRE) group in the Telecommunications and Networks Laboratory of FORTH. INSPIRE has more than 15 members, including post-docs, research engineers, PhD students, etc. and conducts cutting-edge research in the areas of Internet Measurements, Software-Defined Networks, Wireless Networks, and Internet Security and Privacy.

1/2014-3/2019

Assistant Professor

University of Crete (UoC), Computer Science Department, Heraklion, Greece

1/2014–12/2015 Academic Visitor

ETH Zürich, Zürich, Switzerland

Held a Visiting Professor position. Visited frequently ETH Zürich and maintained a very active collaboration.

11/2008-12/2013

Senior Researcher and Lecturer

ETH Zürich, Zürich, Switzerland

Supervised a group of PhD students doing research on network monitoring, software defined networking, privacy, and security topics. Coordinated funded projects and taught graduate courses.

10/2008-07/2011

Lecturer

Open University of Cyprus (OUC), Nicosia, Cyprus

Designed, coordinated, and taught new thematic union on Computer Networks for the graduate distance-learning curriculum of OUC. Supervised MSc theses.

9/2006-10/2008

Post-doctoral Researcher

IBM Research, Zürich, Switzerland

Conducted research on network traffic anomaly detection and on network economics. Contributed to the IBM Aurora project that designed a network traffic profiling system, which was transferred to IBM Tivoli.

5/2006-8/2006 Intern

IBM Research, Zürich, Switzerland

Conducted research on streaming algorithms for network traffic analysis.

5/2005–5/2006 Research Assistant

Georgia Institute of Technology, Atlanta, USA

Introduced novel techniques for generating synthetic annotated graphs that model real network topologies.

1/2005-5/2005 Intern

Cooperative Association for Internet Data Analysis (CAIDA), University of Californina, San Diego (UCSD), San Diego, USA

Designed and validated heuristics for inferring policy relationships between Internet Autonomous Systems (ASs) from routing paths. Held a leading role in the launch of the CAIDA AS Rank and AS Relationships Dataset projects.

8/2004–12/2004 Research Assistant

Georgia Institute of Technology, Atlanta, USA

Designed and developed BGP++, which is a parallel-distributed BGP simulator that integrates the software of the Zebra open source router in the ns-2 network simulator.

5/2004-8/2004 Intern

CAIDA, UCSD, San Diego, USA

Introduced methods for mapping the AS-level topology of the Internet.

8/2002–4/2004 Research Assistant

Georgia Institute of Technology, Atlanta, USA

Designed and developed the BGP++ parallel-distributed BGP simulator.

5/2002-8/2002 Intern

Conklin Corporation, Intracom Group, Atlanta, USA

Designed and implemented SNMP software for managing DSLAMs.

Awards and Honors

- 2019 Acquired a second ERC Proof of Concept Grant
- 2018 Acquired a prestigious **ERC Proof of Concept Grant**
- 2018 **General Chair** of the 2018 ACM International Conference on emerging Networking EXperiments and Technologies (CoNEXT)
- 2018 Program Chair of the 2018 IEEE Global Internet Symposium
- 2017 **Member** of the Program Committee of the 2017 ACM SIGCOMM Conference, which is considered the leading conference in data communications and networking in the world
- 2016 Published article in the **Science Magazine**, one of the world's top academic journals
- 2016 Acquired a prestigious **FET OPEN Grant**, which was coordinated in the INSPIRE group
- 2016 **General Chair** of the 2016 Passive and Active Measurement Conference
- 2014 Acquired a prestigious ERC Starting Grant
- 2013 **Best Paper Award** in IEEE Security & Privacy Symposium Workshop on Cyber Crime for research on mapping network forensics processes in an operational network
- 2012 **Program Chair** of the 2012 Traffic Monitoring and Analysis (TMA) Workshop
- 2008 IBM Invention Achievement Award for successfully filling 3 patent applications
- 2007 Acquired a prestigious Marie Curie Reintegration Grant to return to Europe

- 2006 **Best Paper Award** in Springer Passive and Active Measurement (PAM) Conference for research on inferring the type of ASs in the Internet
- 2004 **Gerondelis Foundation Fellowship** for grad studies of Greek scholars in the US
- 2004 **Intel Corporation Fellowship** for mentoring undergraduate students in Georgia Institute of Technology
- 2001 Fulbright Fellowship for graduate studies in the US
- 2001 Honored to lead the **Graduation Oath** for the highest GPA among all graduating students
- 1999-2001 National Fellowships Foundation of Greece (IKY) Fellowships for having one of the five highest yearly GPAs among all students of the Physics Department
 - Acquired Funding and Project Participation
- 2020-2021 **European Research Council (ERC) Proof of Concept Grant RAVEN**: Routing Attack Vulnerability Evaluation for Networks

 Acquired a prestigious ERC Proof of Concept Grant which aims to build a prototype of a BGP hijacking vulnerability assessment service, employing real-world experimentation, accurate simulations and realistic emulations.
- 2018-2019 **European Research Council (ERC) Proof of Concept Grant PHILOS**: Prefix HIjacking Live detection System

 Acquired a prestigious ERC Proof of Concept Grant to investigate the commercial exploitation of research results about Internet routing security and BGP prefix hijacking in particular.
- 2018–2019 RIPE NCC Community Project ARTEMIS: Automatic and Real-Time dEtection and MItigation System

 Acquired funding from RIPE NCC to build an open source tool for detecting and mitigating BGP prefix hijacking attacks.
- 2016–2019 **FET OPEN VisorSurf**: A Hardware Platform for Software-driven Functional Metasurfaces

 Supporting project development and carrying out project management duties. The entire project, which involves five partners and a total budget of 5,75 million euros, was initiated in FORTH-ICS by my group members.
- 2015–2018 Marie Sklodowska-Curie WIVI-2020: Wireless Visionaries for 2020
 Participating in an Initial Training Network European Industrial Doctorate project.
 Supervising a PhD student, who is supported by the project.
- 2014–2018 **European Research Council (ERC) Starting Grant NetVolution**: Evolving Internet Routing A Paradigm Shift to Foster Innovation Acquired a prestigious ERC Starting Grant to conduct research on evolving the Border Gateway Protocol (BGP) of the Internet based on a novel SDN-based paradigm. Total funding: 1,41 million euros.
- 2012–2013 Privacy-Preserving Data Publishing

Acquired funding from the Zurich Information Security Center (ZISC) to research risk assessment and privacy preservation technologies for facilitating data owners in deciding if aggregate data, like statistics, association rules, and classifiers, can be safely published. The project was funded by Google through ZISC. Initiated project and led writing of project proposal.

2010–2013 DEcentralized, cooperative and privacy-preserving MONitoring for trustworthinesS (DEMONS)

Participated in the FP7 DEMONS project. Supervised research on the design of efficient secure multi-party computation protocols for distributed network anomaly detection, event correlation, and troubleshooting.

2010–2012 **Privacy-Preserving Flow Analyzer**

In partnership with IBM Research Zurich, acquired funding from the Swiss National Science Foundation to transfer the SEPIA multi-party computation library developed in ETH to an IBM pilot privacy-preserving multi-domain traffic flow analyzer. Initiated the project, led writing of project proposal, and coordinated conducted work.

2009–2013 SecMetrics: On Quantifying Operational Security

Acquired funding from the Swiss Defense Procurement Agency to conduct research on network intrusion detection and on security metrics in enterprise networks. Led writing of project proposal.

2008–2010 INfrastructure for heTErogeneous, Resilient, SEcure, Complex, Tightly Inter-Operating Networks (INTERSECTION)

Participated in the FP7 INTERSECTION project, which developed a modular security framework for heterogeneous networks. As part of this project, ETH developed novel techniques and tools to generate synthetic anomalies for evaluating network traffic anomaly detection systems. Supervised conducted research and handled project administration.

2007–2010 Marie Curie International Re-integration Grant

Acquired FP6 funding for conducting research on the management and coordination of network traffic monitoring sensors. The conducted research led to novel monitoring and measurement analysis techniques for mapping service dependencies and for detecting anomalies.

2005–2006 NeTS-NR: Toward Mathematically Rigorous Next-Generation Routing Protocols for Realistic Network Topologies

Participated in National Science Foundation (NSF) project that designed a mathematically rigorous Internet routing scheme for realistic network topologies. Developed novel techniques for measuring and modeling the topology of the Internet at the level of Autonomous Systems.

2004–2006 Large-Scale Network Simulation for Security and Survivability Evaluation Participated in NSF project that built the Georgia Tech Network Simulator (GTNetS).

Helped in the design of the BGP simulation modules.

2004–2005 **Autonomous-System Ranking**

Participated in project funded by Cisco that developed a ranking method for Internet Autonomous Systems (AS), name the CAIDA AS Rank. Led the design of heuristics for inferring AS relationships.

Publications and Patents

The published papers have received a total of 3,407 citations, according to Google Scholar, up to the 10th of Sep, 2019. The corresponding h-index is 30.

Peer-Reviewed Journals and Magazines

- [1] X. Dimitropoulos and G. Riley. Efficient large-scale BGP simulations. *Elsevier Computer Networks, Special Issue on Network Modeling and Simulation*, 50(12), 2006.
- [2] P. Mahadevan, D. Krioukov, M. Fomenkov, B. Huffaker, X. Dimitropoulos, Kc Claffy, and

- A. Vahdat. The Internet AS-level topology: Three data sources and one definitive metric. **ACM SIGCOMM Computer Communication Review** (CCR), 36(1), 2006.
- [3] X. Dimitropoulos, D. Krioukov, M. Fomenkov, B. Huffaker, Y. Hyun, Kc Claffy, and G. Riley. AS relationships: Inference and validation. ACM SIGCOMM Computer Communication Review (CCR), 37(1), 2007.
- [4] X. Dimitropoulos, M. Ángeles Serrano, and D. Krioukov. On cycles in AS relationships. ACM SIGCOMM Computer Communication Review (CCR), Note: This is a non-peer-reviewed Editorial Article, 38(3), 2008.
- [5] X. Dimitropoulos, P. Hurley, and A. Kind. Probabilistic lossy counting: An efficient algorithm for finding network traffic heavy hitters. ACM SIGCOMM Computer Communication Review (CCR), 38(1), 2008.
- [6] X. Dimitropoulos, M. Stocklin, P. Hurley, and A. Kind. The eternal sunshine of the sketch data structure. *Elsevier Computer Networks*, 52(17), 2008.
- [7] A. Kind, S. Denazis, X. Dimitropoulos, and B. Claise. Advanced network monitoring brings life to the awareness plane. *IEEE Communications Magazine*, 46(10), 2008.
- [8] D. Dechouniotis, N. Leontiou, X. Dimitropoulos, A. Kind, and S. Denazis. Unveiling the underlying relationships over a network for monitoring purposes. *Wiley International Journal* of *Network Management*, 19(6), 2009.
- [9] X. Dimitropoulos, D. Krioukov, G. Riley, and A. Vahdat. Graph annotations in modeling complex network topologies. ACM Transactions on Modeling and Computer Simulation, 19(4), 2009.
- [10] A. Kind, M. Stoecklin, and X. Dimitropoulos. Histogram-based traffic anomaly detection. IEEE Transactions on Network and Service Management, 6(2), 2009.
- [11] M. Burkhart and X. Dimitropoulos. Privacy-preserving distributed network troubleshooting

 bridging the gap between theory and practice. ACM Transactions on Information and
 Systems Security (TISS), 14(4), 2011.
- [12] D. Brauckhoff, X. Dimitropoulos, A. Wagner, and K. Salamatian. Anomaly extraction in backbone networks using association rules. *IEEE/ACM Transactions on Networking (ToN)*, 2012.
- [13] M. Burkhart and X. Dimitropoulos. How to protect data privacy in collaborative network security. *ERCIM News*, 90, 2012.
- [14] F. Fusco, X. Dimitropoulos, M. Vlachos, and L. Deri. pcapIndex: An index for network packet traces with legacy compatibility. *ACM SIGCOMM Computer Communication Review* (CCR), 42(1), 2012.
- [15] M. Djatmiko, D. Schatzmann, A. Friedman, X. Dimitropoulos, and R. Boreli. Collaborative network outage troubleshooting with secure multiparty computation. *IEEE Communications Magazine*, 51(11), 2013.
- [16] I. Paredes-Oliva, P. Barlet-Ros, and X. Dimitropoulos. FaRNet: Fast recognition of high multidimensional network traffic patterns. *Elsevier Computer Networks*, 41(1), 2013.
- [17] A. Dainotti, K. Benson, A. King, Kc Claffy, M. Kallitsis, E. Glatz, and X. Dimitropoulos. Estimating internet address space usage through passive measurements. *ACM SIGCOMM Computer Communication Review* (*CCR*), 44(1), 2014.
- [18] A. Gamperli, V. Kotronis, and X. Dimitropoulos. Evaluating the effect of centralization on routing convergence on a hybrid BGP-SDN emulation framework. *ACM SIGCOMM Computer Communication Review (CCR)*, 2014.
- [19] E. Glatz, S. Mavromatidis, B. Ager, and X. Dimitropoulos. Visualizing big network traffic data using frequent pattern mining and hypergraphs. *Springer Journal of Computing*, 2014.

- [20] E. Raftopoulos and X. Dimitropoulos. IDS alert correlation in the wild with EDGe. **IEEE Journal on Selected Areas on Communications** (JSAC), 2014.
- [21] V. Kotronis, A. Gamperli, and X. Dimitropoulos. Routing centralization across domains via SDN: A model and emulation framework for BGP evolution. *Elsevier Computer Networks*, 2015.
- [22] V. Kotronis, R. Kloti, M. Rost, P. Georgopoulos, B. Ager, S. Schmid, and X. Dimitropoulos. Investigating the potential of the inter-IXP multigraph for the provisioning of guaranteed end-to-end services. *SIGMETRICS Performance Evaluation Review* (*PER*), 2015.
- [23] A. Dainotti, E. Katz-Bassett, and X. Dimitropoulos. The BGP hackathon 2016 report. **ACM SIGCOMM Computer Communication Review** (CCR), Note: This is a non-peer-reviewed Editorial Article, 2016.
- [24] D. Gkounis, V. Kotronis, C. Liaskos, and X. Dimitropoulos. On the Interplay of Link-Flooding Attacks and Traffic Engineering. ACM SIGCOMM Computer Communication Review (CCR), 2016.
- [25] R. Kloeti, B. Ager, V. Kotronis, G. Nomikos, and X. Dimitropoulos. A Comparative Look into Public IXP Datasets. *ACM SIGCOMM Computer Communication Review (CCR)*, 2016.
- [26] C. Liaskos, A. Tsioliaridou, A. Pistillides, I.F. Akyildiz, N. Kantartzis, A. Lalas, X. Dimitropoulos, S. Ioannidis, M. Kafesaki, and C. Soukoulis. Design and Development of Software Defined Metamaterials for Nanonetworks. *IEEE Circuits and Systems Magazine*, 2016.
- [27] N. B. Weidmann, S. Benitez-Baleato, P. Hunziker, E. Glatz, and X. Dimitropoulos. Digital discrimination: Political bias in Internet service provision across ethnic groups. *Science*, 2016.
- [28] C. Liaskos, X. Dimitropoulos, and L. Tassiulas. Backpressure on the backbone: A lightweight, non-intrusive traffic engineering approach. *IEEE Transactions on Network and Service Management*, 2017.
- [29] E. Lakiotakis, C. Liaskos, and X. Dimitropoulos. Improving networked music performance systems using application-network collaboration. Wiley Concurrency and Computation: Practice and Experience, 2018.
- [30] P. Sermpezis, V. Kotronis, A. Dainotti, and X. Dimitropoulos. A survey among network operators on BGP prefix hijacking. **ACM SIGCOMM Computer Communication Review**(CCR), Note: This is a non-peer-reviewed Editorial Article, 2018.
- [31] P. Sermpezis, V. Kotronis, P. Gigis, X. Dimitropoulos, D. Cicalese, A. King, and A. Dainotti. Artemis: Neutralizing BGP hijacking within a minute. *IEEE/ACM Transactions on Networking (ToN)*, 2018.

Peer-Reviewed Conferences and Workshops (full papers)

- [32] X. Dimitropoulos and G. Riley. Creating Realistic BGP Models. In IEEE Conference on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MAS-COTS), 2003.
- [33] X. Dimitropoulos and G. Riley. Large-scale Simulation Models of BGP. In IEEE Conference on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS), 2004.
- [34] J. Kim, S. Ko, D. Nicol, X. Dimitropoulos, and G. Riley. A BGP attack against traffic engineering. In *IEEE/ACM/SCS Winter Simulation Conference* (WSC), 2004.
- [35] X. Dimitropoulos, D. Krioukov, B. Huffaker, Kc Claffy, and G. Riley. Inferring AS Relationships: Dead End or Lively Beginning? In *Springer Workshop on Experimental Algorithms* (WEA), 2005.
- [36] X. Dimitropoulos, D. Krioukov, and G. Riley. Revisiting Internet AS-Level Topology Discovery. In *Springer Passive and Active Measurement Conference (PAM)*, 2005.

- [37] X. Dimitropoulos, D. Krioukov, G. Riley, and Kc Claffy. Revealing the Autonomous System Taxonomy: The Machine Learning Approach. In *Springer Passive and Active Measurement Conference (PAM)*, 2006.
- [38] X. Dimitropoulos and G. Riley. Modeling Autonomous-Systems Relationships. In *IEEE/ACM/SCS Principles of Advanced and Distributed Simulations (PADS)*, 2006.
- [39] D. Dechouniotis, X. Dimitropoulos, A. Kind, and S. Denazis. Dependency Detection Using a Fuzzy Inference Engine. In *IFIP/IEEE International Workshop on Distributed Systems, Operations and Management* (DSOM), 2007.
- [40] D. Brauckhoff, X. Dimitropoulos, A. Wagner, and K. Salamatian. Anomaly Extraction in Backbone Networks using Association Rules. In ACM SIGCOMM Internet Measurement Conference (IMC), 2009.
- [41] X. Dimitropoulos, P. Hurley, A. Kind, and M. Stoecklin. On the 95-percentile billing method. In *Springer Passive and Active Measurement Conference* (*PAM*), 2009.
- [42] M. Burkhart and X. Dimitropoulos. Fast Privacy-Preserving Top-k Queries using Secret Sharing (invited). In *IEEE International Conference on Computer Communication and Networks* (ICCCN), 2010.
- [43] M. Burkhart, M. Strasser, D. Many, and X. Dimitropoulos. SEPIA: Privacy-Preserving Aggregation of Multi-Domain Network Events and Statistics. In *USENIX Security Symposium*, 2010.
- [44] D. Schatzmann, W. Mulbauer, T. Spyropoulos, and X. Dimitropoulos. Digging into HTTPS: Flow-Based Classification of Webmail Traffic. In ACM SIGCOMM Internet Measurement Conference (IMC), 2010.
- [45] E. Raftopoulos and X. Dimitropoulos. Detecting, Validating and Characterizing Computer Infections in the Wild. In **ACM SIGCOMM Internet Measurement Conference** (IMC), 2011.
- [46] A. Abdelkefi, Y. Jiang, and X. Dimitropoulos. K-sparse approximation for traffic histogram dimensionality reduction. In *International Conference on Network and Service Management* (CNSM), 2012.
- [47] F. Fusco, M. Vlachos, and X. Dimitropoulos. RasterZIP: Compressing network monitoring data with support for partial decompression. In **ACM SIGCOMM Internet Measurement Conference** (IMC), 2012.
- [48] E. Glatz and X. Dimitropoulos. Classifying Internet One-way Traffic. In **ACM SIGCOMM** Internet Measurement Conference (IMC), 2012.
- [49] V. Kotronis, X. Dimitropoulos, and B. Ager. Outsourcing the routing control logic: better internet routing based on sdn principles. In *ACM Hot Topics in Networks* (HotNets), 2012.
- [50] I. Paredes-Oliva, I. Castell-Uroz, P. Barlet-Ros, X. Dimitropoulos, and J. Sole-Pareta. Practical anomaly detection based on classifying frequent traffic patterns. In *IEEE Global Internet Symposium*, 2012.
- [51] E. Raftopoulos, M. Egli, and X. Dimitropoulos. Shedding light on log correlation in network forensics analysis. In *International Conference on Detection of Intrusions and Malware, and Vulnerability Assessment (DIMVA)*, 2012.
- [52] M. Djatmiko, D. Schatzmann, A. Friedman, X. Dimitropoulos, and R. Boreli. Federated flow-based approach for privacy preserving connectivity tracking. In *ACM SIGCOMM CoNext*, 2013.
- [53] F. Fusco, M. Vlachos, X. Dimitropoulos, and L. Deri. Indexing million of packets per second using GPUs. In *ACM SIGCOMM Internet Measurement Conference (IMC)*, 2013.
- [54] E. Raftopoulos and X. Dimitropoulos. Understanding network forensics analysis in an operational environment. In *IEEE Security & Privacy Symposium Workshop on Cyber Crime*, 2013.

- [55] J. Yan and X. Dimitropoulos. Revisiting the anomalous loss performance of udp traffic in routers with very small buffers. In *IEEE International Symposium on Computer Communications* (ISCC), 2014.
- [56] S. Baleato, N. Weidmann, P. Gigis, X. Dimitropoulos, G. Eduard, and T. Brian. Transparent estimation of internet penetration from network observations. In *Springer Passive and Active Measurement Conference* (PAM), 2015.
- [57] R. Kloti, V. Kotronis, B. Ager, and X. Dimitropoulos. Policy-compliant path diversity and bisection bandwidth. In *IEEE INFOCOM*, 2015.
- [58] E. Raftopoulos, E. Glatz, X. Dimitropoulos, and A. Dainotti. How dangerous is internet scanning? a measurement study of the aftermath of an internet-wide scan. In *Springer Traffic Monitoring and Analysis* (TMA), 2015.
- [59] V. Kotronis, R. Kloeti, M. Rost, P. Georgopoulos, B. Ager, S. Schmidt, and X. Dimitropoulos. Stitching Inter-Domain Paths over IXPs. In ACM Symposium on SDN Research (SOSR), 2016.
- [60] C. Liaskos, V. Kontronis, and X. Dimitropoulos. A Novel Framework for Modeling and Mitigating Distributed Link Flooding Attacks. In *IEEE INFOCOM*, 2016.
- [61] G. Nomikos and X. Dimitropoulos. tralXroute: Detecting IXPs in traceroute paths. In *Passive* and Active Measurement Conference (PAM), 2016.
- [62] T. Assefa, R. Hoque, E. Tragos, and X. Dimitropoulos. SDN-based Local Mobility Management with X2-interface in Femtocell Networks. In *IEEE Workshop on Computer Aided Modeling* and Design of Communication Links and Networks (CAMAD), 2017.
- [63] V. Kotronis, G. Nomikos, L. Manassakis, D. Mavrommatis, and X. Dimitropoulos. Shortcuts through colocation facilities. In *ACM Internet Measurement Conference (IMC)*, 2017.
- [64] E. Lakiotakis, C. Liaskos, and X. Dimitropoulos. Application-Network Collaboration Using SDN for Ultra-Low Delay Teleorchestras. In *IEEE Workshop on Performance Evaluation of Communications in Distributed Systems and Web based Service Architectures*, 2017.
- [65] P. Sermpezis and X. Dimitropoulos. Can SDN Accelerate BGP Convergence? A Performance Analysis of Inter-domain Routing Centralization. In *IFIP Networking*, 2017.
- [66] P. Sermpezis, G. Nomikos, and X. Dimitropoulos. Re-mapping the Internet: Bring the IXPs into Play. In *IEEE INFOCOM NetSciCom Workshop*, 2017.
- [67] S. Kastanakis, P. Sermpezis, V. Kotronis, and X. Dimitropoulos. Cabaret: Leveraging recommendation systems for mobile edge caching. In ACM SIGCOMM Workshop on Mobile Edge Communications (MECOMM), 2018.
- [68] G. Nomikos, V. Kotronis, P. Sermpezis, P. Gkigkis, L. Manassakis, C. Dietzel, S. Konstantaras, X. Dimitropoulos, and V. Giotsas. O peer, where art thou? uncovering remote peering interconnections at IXPs. In *ACM Internet Measurement Conference (IMC)*, 2018.
- [69] A. Milolidakis, R. Fontugne, and X. Dimitropoulos. Detecting Network Disruptions At Colocation Facilities. In *IEEE INFOCOM*, 2019.

Patents

- [70] D. Bauer, D. Dechouniotis, X. Dimitropoulos, and A. Kind. Valley-free shortest path method. **US Patent** 7907596, 2011.
- [71] X. Dimitropoulos, P. Hurley, A. Kind, and M. Stoecklin. Probabilistic lossy counting. **US Patent** 7937388, 2011.
- [72] X. Dimitropoulos, A. Kind, B. Jansen, and J. Massar. Determination of network topology using flow-based traffic information. **US Patent** 7864707, 2011.

Peer-Reviewed Conferences and Workshops (extended abstracts)

- [73] X. Dimitropoulos, D. Krioukov, G. Riley, and Kc Claffy. Classifying the types of Autonomous Systems in the Internet (poster). In *ACM SIGCOMM*, 2005.
- [74] X. Dimitropoulos, G. Riley, D. Krioukov, and R. Sundaram. Towards a topology generator modeling AS relationships (poster). In *IEEE International Conference on Network Protocols* (ICNP), 2005.
- [75] X. Dimitropoulos and A. Kind. Simplifying the configuration of network monitoring probes. In *CERT FloCon Conference*, 2008.
- [76] M. Burkhart, M. Strasser, D. Many, and X. Dimitropoulos. SEPIA: Aggregation of network measurements using multiparty computation (poster). In *Springer Passive and Active Measurement Conference* (*PAM*), 2010.
- [77] I. Paredes-Oliva, X. Dimitropoulos, M. Molina, P. Barlet-Ros, and D. Brauckhoff. Automating root-cause analysis of network anomalies using frequent itemset mining (demo). In ACM SIGCOMM, 2010.
- [78] D. Schatzmann, W. Mulbauer, T. Spyropoulos, X. Dimitropoulos, and Bernhard Plattner. The Internet mail system from the network's perspective (poster). In *Springer Passive and Active Measurement Conference* (PAM), 2010.
- [79] X. Dimitropoulos. Research roadmap on security measurements. In SysSec Workshop, 2011.
- [80] E. Glatz and X. Dimitropoulos. Classifying internet one-way traffic (poster). In **ACM SIG- METRICS**, 2012.
- [81] M. Djatmiko, D. Schatzmann, A. Friedman, X. Dimitropoulos, and R. Boreli. Privacy preserving distributed network outage monitoring (poster). In *IEEE INFOCOM*, 2013.
- [82] V. Kotronis, X. Dimitropoulos, and B. Ager. Outsourcing routing using SDN: The case for a multi-domain routing operating system (poster). In *Open Networking Summit*, 2013.
- [83] I. Paredes-Oliva, P. Barlet-Ros, and X. Dimitropoulos. FaRNet: Fast recognition of high multidimensional network traffic patterns (poster). In ACM SIGMETRICS, 2013.
- [84] A. Gamperli, V. Kotronis, and X. Dimitropoulos. Evaluating the effect of centralization on routing convergence on a hybrid BGP-SDN emulation framework (demo). In ACM SIGCOMM CCR, 2014.
- [85] V. Kotronis, X. Dimitropoulos, R. Kloti, B. Ager, P. Georgopoulos, and S. Schmid. Control exchange points: Providing QoS-enabled end-to-end services via SDN-based inter-domain routing orchestration. In *Open Networking Summit* (ONS), 2014.
- [86] V. Kotronis, R. Kloti, M. Rost, P. Georgopoulos, B. Ager, S. Schmid, and X. (poster) Dimitropoulos. Investigating the potential of the inter-IXP multigraph for the provisioning of guaranteed end-to-end services. In ACM SIGMETRICS, 2015.
- [87] G. Chaviaras, P. Gigis, P. Sermpezis, and X. Dimitropoulos. Artemis: Real-time detection and automatic mitigation for bgp prefix hijacking (demo). In *ACM SIGCOMM*, 2016.
- [88] P. Sermpezis and X. Dimitropoulos. Inter-domain SDN: Analysing the effects of routing centralization on BGP convergence time. In *ACM SIGMETRICS MAMA Workshop*, 2016.
- [89] T. Assefa, R. Hoque, E. Tragos, and X. Dimitropoulos. SDN-based Handover Management in Enterprise Networked Femtocells with X2 Forwarding Scheme (poster). In *IEEE INFOCOM* (workshop), 2017.
- [90] P. Gigis, V. Kotronis, E. Aben, S. D. Strowes, and X. Dimitropoulos. Characterizing User-to-User Connectivity with RIPE Atlas. In *IETF Applied Networking Research Workshop* (ANRW), 2017.
- [91] E. Lakiotakis, C. Liaskos, and X. Dimitropoulos. Enabling Ultra-Low Delay Teleorchestras using Software-Defined Networking. In ACM CoNEXT (Student workshop), 2017.

lected	Sor	VICA

Conference Organization

2018 **General Chair**

ACM International Conference on emerging Networking EXperiments and Technologies (CoNEXT), Heraklion, Greece

2018 **General Chair**

IEEE Global Internet (GI) Symposium (in conjunction with IEEE INFOCOM 2018), Honolulu, USA

2016 - present **Steering Committee**

Passive and Active Measurement (PAM) Conference

2016 General Chair

Passive and Active Measurement (PAM) Conference, Heraklion, Greece

2016 **Organizing Committee**

The BGP Hackathon, San Diego, USA

2015 **General Chair**

Summer School on Software Defined Networks (SDNschool), Heraklion, Greece

2014 **Organizing Committee**

ACM CoNext, Sydney, Australia

2014 **Organizing Committee**

ACM SIGCOMM, Chicago, USA

2012 - 2016 **Steering Committee**

COST Traffic Monitoring and Analysis (TMA) Workshop

2012 **Program Chair**

Traffic Monitoring and Analysis (TMA) Workshop, Vienna, Austria

2010 Local Arrangements Chair

Passive and Active Measurement (PAM) Conference, Zurich, Switzerland

2010 Local Arrangements Chair

COST Traffic Monitoring and Analysis (TMA) Workshop, Zurich, Switzerland

2009 **Program Chair**

IEEE International Symposium on Network Evolution and Routing Innovation, Chengdu, China

Conference Program Committees (PC)

2019 PC Member

Passive and Active Measurement (PAM) Conference, Oregon, USA

2019 PC Member

ACM CoNEXT, Orlando, USA

2018 PC Member

Passive and Active Measurement (PAM) Conference, Puerto Varas, Chile

2017 **PC Member**

ACM SIGCOMM, Los Angeles, USA

2017 PC Member

Passive and Active Measurement (PAM) Conference, Sydney, Australia

2015 PC Member

ACM SIGCOMM Internet Measurement Conference (IMC), Tokyo, Japan

2015 **PC Member**

IEEE Conference on Network Function Virtualization and Software Defined Networks, Berlin, Germany

2014 PC Member

ACM SIGCOMM Distributed Cloud Computing (DCC) Workshop, Chicago, USA

2014 PC Member

ACM SIGCOMM Internet Measurement Conference (IMC), Vancouver, Canada

2014 PC Member

IEEE ICC - Next-Generation Networking Symposium, Sydney, Australia

2013 PC Member

Passive and Active Measurement (PAM) Conference, Hong Kong

2013 PC Member

ACM CoNEXT, Santa Barbara, USA

2012 PC Member

ACM SIGCOMM Internet Measurement Conference (IMC), Boston, USA

2012 PC Member

USENIX Hot-ICE: Workshop on Hot Topics in Management of Internet, Cloud, and Enterprise Networks and Services, San Jose, USA

2012 PC Member

IEEE International Symposium on Computer Communications (ISCC), Cappadocia, Turkey

2011 PC Member

ACM SIGCOMM Internet Measurement Conference (IMC), Berlin, Germany

2011 PC Member

IEEE International Symposium on Computer Communications (ISCC), Corfu, Greece

2010 PC Member

COST Traffic Monitoring and Analysis (TMA) Workshop, Zurich, Switzerland

2008 PC Member

COST Traffic Monitoring and Analysis (TMA) Workshop, Aachen, Germany

2006 PC Member

ACM SIGCOMM CoNext Student Workshop, Lisboa, Portugal

Service in European Projects

2015–2017 Advisory Board

Member of the H2020 ENDEAVOUR project External Advisory Board.

2009–2012 Management Committee Member

COST Action Traffic Monitoring and Analysis (TMA)

2010 **Expert Group Member**

Participated in meetings of the Future Internet Assembly towards developing a reference Future Internet Architecture

External Reviewer

2012 Microsoft Research PhD Scholarship Programme

2004-present

IEEE/ACM Transactions on Networking (ToN), ACM SIGCOMM Computer Communication Review (CCR), IEEE Journal on Selected Areas on Communications (JSAC), ACM Transactions on Dependable and Secure Computing (TDSC), ACM SIGMET-RICS Performance Evaluation Review (PER), IEEE Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS), IEEE International Workshop on Wireless Local Networks (WLN), IEEE/ACM/SCS Principles of Advanced and Distributed Simulations, IEEE/ACM/SCS Winter Simulation Conference, EPL Europhysics Letters, Elsevier Microprocessors and Microsystems

Courses Taught

Fall 2019 Security, Privacy, and Intelligence on the Internet (HY-533)

Computer Science Department, University of Crete Updated the project and the structure of the course.

Fall 2019 **Software-Defined Networks (SDN)** (HY-436)

Computer Science Department, University of Crete

Updated the teaching material of the course.

Spring 2019 Computer Networks (CN) (HY-335)

Computer Science Department, University of Crete

Updated the teachning material and the exercises of the course.

Spring 2018 Computer Networks (CN) (HY-335)

Computer Science Department, University of Crete

Updated the teachning material and the exercises of the course.

Spring 2018 **Security, Privacy, and Intelligence on the Internet** (HY-533)

Computer Science Department, University of Crete Updated the project and the structure of the course.

Fall 2017 **Software-Defined Networks (SDN)** (HY-436)

Computer Science Department, University of Crete

Updated the teaching material of the course.

Spring 2017 **Computer Networks (CN)** (HY-335)

Computer Science Department, University of Crete

Updated the teachning material and the exercises of the course.

Fall 2016 Security, Privacy, and Intelligence on the Internet (HY-533)

Computer Science Department, University of Crete

Created entirely new post-graduate course focused on Internet security, privacy, and intelligence research topics. The course also introduces through practical projects the principles of Design Thinking; it applies Design Thinking to teach students how to solve research challenges.

Fall 2016 **Software-Defined Networks (SDN)** (HY-436)

Computer Science Department, University of Crete

Updated the teaching material of the course. All lectures were recorded and published online.

Spring 2016 **Computer Networks** (HY-335)

Computer Science Department, University of Crete Entirely updated all the lectures material of the course.

Fall 2015 **Software-Defined Networks (SDN)** (HY-436)

Computer Science Department, University of Crete

Created new exercises and teaching material.

Spring 2015 **Computer Networks** (HY-335)

Computer Science Department, University of Crete Updated the teaching material of the course.

Fall 2014 Software-Defined Networks (HY-436)

Computer Science Department, University of Crete

Introduced entirely new undergraduate course on SDN with a strong emphasis on handson assignments.

Spring 2014 **Computer Networks** (HY-335)

Computer Science Department, University of Crete

Updated entirely the CN course of the Computer Science Department with new teaching material and assignments.

Fall 2013 Advanced Topics in Communication Networks (ATCN) (227-0575-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich With Dr. B. Ager, Dr. S. Neuhaus, Dr. K. Hummel, Dr. M. Happe, V. Kotronis and Prof. B. Plattner, taught ATCN course. Built entirely new curriculum dedicated to Software-Defined Networking.

Spring 2013 **Software-Defined Networks** (HY-490.31)

Computer Science Department, University of Crete Introduced new short (6-week) course on SDN.

Spring 2013 **Communication Networks** (227-0120-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich With Dr. S. Neuhaus and Dr. K. Hummel, taught CN course.

Spring 2012 **Communication Networks** (227-0120-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich With Dr. S. Neuhaus and Dr. K. Hummel, taught CN course. Introduced lecture on software-defined networking.

Fall 2011 Advanced Topics in Communication Networks (227-0575-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich With Dr. F. Legendre, Dr. W. Muhlbauer, Dr. S. Neuhaus and Prof. B. Plattner, taught ATCN course. Updated curriculum with latest topics on Internet measurements.

Spring 2011 Communication Networks (227-0120-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich Gave guest lecture on Internet routing.

Fall 2010 – **Specialization in Networks and Communications** (PLHS62)

Spring 2011 MSc in Information Systems, Open University of Cyprus (OUC)

Coordinated and taught the Networks and Communications thematic union of OUC. Updated curriculum with entirely new textbook that focuses on practical aspects of network security. Prepared student assignments.

Fall 2010 Advanced Topics in Communication Networks (227-0575-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich With Dr. F. Legendre, Dr. W. Muhlbauer, Dr. T. Spyropoulos and Prof. B. Plattner, taught ATCN course. Updated curriculum with latest topics on Internet measurements. Introduced course projects.

Spring 2010 **Communication Networks** (227-0120-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich Gave guest lecture on Internet routing.

Fall 2009 - **Specialization in Networks and Communications** (PLHS62)

Spring 2010 MSc in Information Systems, Open University of Cyprus

Developed and coordinated a brand-new thematic union that gives students practical experience with computer networks and security.

Fall 2009 Advanced Topics in Communication Networks (227-0575-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich With Dr. F. Legendre, Dr. T. Spyropoulos, and Prof. B. Plattner, taught ATCN course. Updated curriculum with new lectures covering selected topics on Internet measurement research. Prepared related assignments.

Spring 2009 Communication Networks (227-0120-00L)

Department of Information Technology and Electrical Engineering, ETH Zürich Gave guest lectures on Internet routing.

Fall 2008 - Specialization in Computer Architecture and Computer Networks (PLHS52)

Spring 2009 MSc in Information Systems, Open University of Cyprus

With Prof. C. Halatsis, re-designed curriculum introducing material on Operating Systems.

Supervised Students and Researchers

Post-doctoral Researchers

1 Christos Liaskos, 2014 – present

Research Area: Software-Defined Networks, Wireless Networks, Nanonetworks

Institute: FORTH-ICS

2 Ioanna Papafili, 2015 - 2016

Research Area: Internet Measurements, Software-Defined Networks

Institute: FORTH-ICS

3 Pavlos Sermpezis, 2015 – present

Research Area: Internet Routing, Software-Defined Networks

Institute: FORTH-ICS

4 Vasileios Kotronis, 2016 – present

Research Area: Internet Routing, Software-Defined Networks

Institute: FORTH-ICS

Research Engineers

1 George Nomikos, 2014 - present

Research Area: Internet Measurements

Institute: FORTH-ICS

2 Dimitrios Gkounis, 2014 – 2015

Research Area: Software-Defined Networks

Institute: FORTH-ICS

3 Lefteris Manassakis, 2015 – present

Research Area: Internet Routing, Software-Defined Networks

Institute: FORTH-ICS

4 Dimitris Mavrommatis, 2018 – present Research Area: Internet Routing Security

Institute: FORTH-ICS

5 Petros Gigis, 2018 – present

Research Area: Internet Routing Security

Institute: FORTH-ICS

PhD Dissertations

1 Daniela Brauckhoff (Co-supervised with Prof. B. Plattner), 2008 – 2009

Research Area: Anomaly Detection

Institute: ETH Zurich

2 Martin Burkhart (Co-supervised with Prof. B. Plattner), 2008 – 2011

Research Area: Privacy, Collaborative Network Security, Applied Secure Multiparty

Computation

Institute: ETH Zurich

3 Francesco Fusco (Co-supervised with Prof. B. Plattner), 2009 – 2012 Research Area: Indexing and Archival of Network Measurement Data Institute: ETH Zurich (external PhD student in IBM Research, Zurich)

4 Ignasi Paredes-Oliva (Co-supervised with Prof. P. Barlet-Ros), 2009 – 2013

Research Area: Network Traffic Monitoring Institute: Universitat Politecnica de Catalunya

5 Eduard Glatz (Co-supervised with Prof. B. Plattner), 2009 – 2013

Research Area: Network Traffic Classification and Vizualization

Institute: ETH Zurich

6 Elias Raftopoulos (Co-supervised with Prof. B. Plattner), 2009 – 2014

Research Area: Network Intrusion Detection, Malware, Infections

Institute: ETH Zurich

7 Vasileios Kotronis (Co-supervised with Prof. B. Plattner), 2011 – 2015

Research Area: Software-Defined Networks

Institute: ETH Zurich

8 Emmanouil Lakiotakis, 2017 – present

Research Area: Network Modelling, Software-Defined Networks

Institute: University of Crete

MSc Theses

1 Fotios Kerasiotis, 2009 – 2011

Thesis title: Space-time Vizualization of Blacklisted IP addresses

Institute: Open University of Cyprus

2 Raphael Blatter (Co-supervised with E. Glatz, and Prof. B. Stiller), 2010 - 2011

Thesis Title: Extending HAPviewer: Time Window, Flow Classification, and Geoloca-

tion

Institute: University of Zurich

3 Matthias Egli (Co-supervised with E. Raftopoulos and Prof. B. Plattner), 2011

Thesis title: Security Assessment of Infection Incidents in the ETH University Campus

Institute: ETH Zurich

4 Stylianos Mavromatidis, 2010 – 2012

Thesis title: Evaluation of Frequent Itemset Mining for Summarizing and Monitoring

Network Traffic

Institute: Open University of Cyprus

5 Merkourios Gogos, 2011 – 2012

Thesis title: Application and Evaluation of Quality of Experience (QoE) and Service (QoS) Metrics on a VoIP Telephone Exchange

Institute: Open University of Cyprus

6 Konstantinos Karampogias (Co-supervised with P. Stuedi and Prof. B. Plattner), 2012 – 2013

Thesis title: Leveraging RDMA Semantics in Hadoop Distributed Filesystem Institute: ETH Zurich (external MSc thesis in IBM Research, Zurich)

- 7 Jochen Mattes (Co-supervised with V. Kotronis and Prof. B. Plattner), 2012 2013 Thesis title: Policy Validation in OpenFlow Networks Institute: ETH Zurich (in part external MSc thesis in Stanford University)
- 8 Dimitrios Gkounis (Co-supervised with V. Kotronis and Prof. B. Plattner), 2013 2014 Thesis title: Cross-domain DoS Link-flooding Attack Detection and Mitigation Using SDN Principles

Institute: ETH Zurich

9 Adrian Gamperli (Co-supervised with V. Kotronis and Prof. B. Plattner), 2013 – 2014 Thesis title: Evaluating the Effect of SDN Centralization on Internet Routing Convergence

Institute: ETH Zurich

10 Emmanouil Lakiotakis, 2015 – 2017

Thesis title: SDN-based Application-Network Collaboration for Low-Latency Networked Music Performance Systems

Institute: University of Crete

11 Michalis Bamiedakis, 2015 – 2017

Thesis title: Farcast: Improving Forecasting Accuracy via SDN

Institute: University of Crete

- 12 Georgios Vardakis (Co-supervised with Dr. S. Papadakis), 2015 2017 Thesis title: METAL - Multiple Emitters Tracking And Localization system Institute: University of Crete
- 13 Konstantinos Triantafilakis (Co-supervised with Dr. S. Papadakis), 2015 2017 Thesis title: Phasma: An ÎŚutomatic Modulation Classification System Based on Random Forest

Institute: University of Crete

14 Alexandros Milolidakis, 2016 – 2018

Thesis title: Detecting Traffic Anomalies At Colocation Facilities

Institute: University of Crete

15 Dimitris Mavrommatis, 2016 – 2018

Thesis title: ARTEMI-ONOS: SDN-based Real-Time Detection and Automatic Mitigation of BGP Prefix Hijacking

Institute: University of Crete

16 Petros Gigis, 2017 – 2018

Thesis title: Measuring the Internet Connectivity Between User Populations Using Active

Measurement Approaches Institute: University of Crete 17 Ioannis Papoutsidakis (Co-supervised with Dr. S. Papadakis), 2017 – 2018 Thesis title: Linear Coding for the Gaussian Multiple Access Channel that achieves Sum Capacity

Institute: University of Crete

- 17 Nikolaos Karamalegkos (Co-supervised with Dr. S. Papadakis), 2017 present Tentative thesis title: Development of Middleware Platform for IoT Devices Institute: University of Crete
- 18 Savvas Kastanakis, 2018 present

Tentative thesis title: Mobile Edge Caching using Recommendation Systems

Institute: University of Crete

19 Konstantinos Arakadakis, 2018 - present

Tentative thesis title: Improving Inter-domain Routing Security

Institute: University of Crete

BSc Theses

1 Petros Gigis, 2015

Thesis title: Internet Penetration Estimation Based on Internet Measurements Institute: University of Crete

2 Anastasia Ntagianta (Co-supervised with Dr. S. Papadakis), 2015 Thesis title: Outdoor Sensor Network Set-up and Experiment Institute: University of Crete

3 Nikolaos Stefanou (Co-supervised with Dr. S. Papadakis), 2015 Thesis title: Indoor Sensor Network Set-up and Experiment Institute: University of Crete

4 Antonios Tzougkarakis (Co-supervised with Dr. S. Papadakis), 2015 Thesis title: SDR-based Sensor Network Development

Institute: University of Crete

5 Gavriil Chaviaras, 2015 – 2016

Thesis title: Minilogic: Graphical Environment for Managing SDN Simulations Institute: University of Crete

6 Nestoras Sdoukos (Co-supervised with Dr. S. Papadakis), 2016 Thesis title: GPU-based Real-time Spectrum Analyzer Implementation Institute: University of Crete

7 Louka Kovatsevic (Co-supervised with Dr. E. Tragos), 2016 Thesis title: Implementation of Sensor Measurements Collector Institute: University of Crete

8 Elias Matzelios, 2016 – 2017

Thesis title: Fortifying Network Topologies Against DDoS Attacks Using Optimization Algorithms

Institute: University of Crete

9 Michael Vassalos (Co-supervised with Dr. S. Papadakis), 2016 – 2017 Thesis title: GPU-based Real-Time Spectrum Analyzer User Interface Implementation Institute: University of Crete

Georgios Floros (Co-supervised with Dr. S. Papadakis), 2016 – 2017 Thesis title: FPGA Implementation for the PCI-e Communication Support in SDR Card Institute: University of Crete 11 Christos Kadigkos (Co-supervised with Dr. S. Papadakis), 2017 – 2018

Thesis title: Red Pitaya Implementation of Baseband Sweep Phase Difference Detector

Institute: University of Crete

12 Konstantinos Arakadakis, 2017 – 2018

Thesis title: Comparison of BGP Hijacking Detection Systems

Institute: University of Crete

13 Savvas Kastanakis, 2017 – 2018

Thesis title: On Building a Youtube Caching and Recommendation System for Android

Devices

Institute: University of Crete

14 Ilias Sfirakis, 2018 – present

Thesis title: Interdomain Routing Blockchain

Institute: University of Crete

15 Giorgos Moudatsakis, 2018 – present

Thesis title: BGP wedgie detection over ONOS

Institute: University of Crete

Exam Committee Member of Other PhD and MSc Students

1 Daniela Brauckhoff, 2009

PhD Dissertation title: Network Traffic Anomaly Detection and Evaluation

Institute: ETH Zurich

2 Martin Burkhart, 2011

PhD Dissertation title: Enabling Collaborative Network Security with Privacy-Preserving

Data Aggregation Institute: ETH Zurich

3 Francesco Fusco, 2012

PhD Dissertation title: High-speed Indexing and Archival of Network Measurements

Data

Institute: ETH Zurich
4 Josep Sanjuas, 2012

PhD Dissertation title: Efficient Algorithms for Passive Network Measurement

Institute: Universitat Politcnica Catalunya

5 Dominik Schatzmann, 2012

PhD Dissertation title: Correlating Flow-based Network Measurements for Service Mon-

itoring and Network Troubleshooting

Institute: ETH Zurich 6 Eduard Glatz, 2013

PhD Dissertation title: Novel Techniques for Monitoring Network Traffic at the Flow

Level

Institute: ETH Zurich

7 Ioannis Mastorakis, 2015

MSc Thesis title: The implementation of ImmACS - An Immersive Audio Communica-

tion System

Institute: University of Crete

8 Pavlos Charonyktakis, 2015

MSc Thesis title: On User-Centric Modular QoE Prediction for VoIP Based on Machine-

Learning Algorithms

Institute: University of Crete

9 Michalis Katsarakis, 2015

MSc Thesis title: u-map: Empowering Users and Telecom Providers by Employing the

Crowd-Sourcing Paradigm Institute: University of Crete

10 Charalampos Meidanis, 2015

MSc Thesis title: On the Impact of User Demand and Willingness-to-pay on Price

Setting of MVNO and MNO Assuming Unlimited Network Capacity

Institute: University of Crete

11 Panagiotis Papadopoulos, 2015 – 2018

PhD Dissertation title: Analyzing the Impact of Digital Advertising on User Privacy

Institute: University of Crete

12 Georgios Fortetsanakis, 2016

PhD Dissertation title: A Multi-layer Game-theoretical Framework for Modelling Wire-

less Access and Spectrum Markets

Institute: University of Crete

13 Filipos Ineglis, 2016

MSc Thesis title: Incorporating Microphone Arrays into Automatic Speech Recognition

Institute: University of Crete

14 Michalis Peronikolis, 2016

MSc Thesis title: Audio Signal Processing for Immersive Audio Applications

Institute: University of Crete

15 Michalis Diamantaras, 2017

MSc Thesis title: Powerslave: Analyzing the Energy Consumption of Mobile Antivirus

Software

Institute: University of Crete