

Outreach and Marketing

Publications

(1) <https://arxiv.org/abs/1801.01085v2>

Title: ARTEMIS: Neutralizing BGP Hijacking within a Minute (technical report)
Authors: Sermpezis, P., Kotronis, V., Gigis, P., Dimitropoulos, X., Cicalese, D., King, A., Dainotti, A. Date: Jan 2018
Venue: arXiv
Keywords: passive data analysis, routing, security, software/tools, topology

(2) http://www.caida.org/publications/papers/2018/survey_among_network_operators/ Title: A Survey among Network Operators on BGP Prefix Hijacking

Authors: Sermpezis, P., Kotronis, V., Dainotti, A., Dimitropoulos, X. Date: Jan 2018
Venue: ACM SIGCOMM Computer Communication Review (CCR), v. 48 (1), pp. 64-69
Keywords: security, routing, passive data analysis, topology

(3) <https://dl.acm.org/citation.cfm?doi=3234200.3234209>

Title: On the Potential of BGP Flowspec for DDoS Mitigation at Two Sources: ISP and IXP
Authors: N. Hinze, M. Nawrocki, M. Jonker, A. Dainotti, T. Schmidt, and M. Wählisch
Date: August 2018
Venue: Proceeding of the ACM SIGCOMM 2018 Conference on Posters and Demos, pp. 57-59
Keywords: internet outages, measurement methodology, network telescope, security software/tools, topology

(4) http://www.caida.org/publications/papers/2018/inferring_carrier_grade_nat/

Title: Inferring Carrier-Grade NAT Deployment in the Wild
Authors: I. Livadariu, K. Benson, A. Elmokashfi, A. Dainotti, and A. Dhamdhare
Date: April 2018
Venue: INFOCOM
Keywords: IPv6, measurement methodology

(5) <https://dl.acm.org/citation.cfm?id=3278571>

Title: A First Joint Look at DoS Attacks and BGP Blackholing in the Wild
Authors: Jonker, Mattijs, Aiko Pras, Alberto Dainotti, and Anna Sperotto
Date: October 2018
Venue: Internet Measurement Conference
Keywords: Denial-of-Service; DDoS Mitigation; BGP; Blackholing

(6) <https://arxiv.org/abs/1906.04426>

Title: Chocolatine: Outage Detection for Internet Background Radiation
Authors: A. Guillot, R. Fontugne, P. Winter, P. Mérindol, A. King, A. Dainotti, and C. Pelsser

Date: June 2019
Venue: Proceedings of Network Traffic Measurement and Analysis Conference (TMA)
Keywords: internet outages, passive data analysis, security, network telescope

(7) https://tma.roc.cnam.fr/Proceedings/TMA_Paper_2.pdf

Title: Geo-Locating BGP prefixes
Authors: P. Winter, R. Padmanabhan, A. King, and A. Dainotti
Date: June 2019
Venue: Proceedings of Network Traffic Measurement and Analysis Conference (TMA)
Keywords: internet outages, measurement methodology, routing

(8) https://tma.roc.cnam.fr/Proceedings/TMA_Paper_4.pdf

Title: BGP hijacking classification
Authors: S. Cho, R. Fontugne, K. Cho, A. Dainotti, and P. Gill
Date: June 2019
Venue: Proceedings of Network Traffic Measurement and Analysis Conference (TMA)
Keywords: routing, security, topology

(9) <https://ccronline.sigcomm.org/2019/ccr-july-2019/towards-passive-analysis-of-anycast-in-global-routing-unintended-impact-of-remote-peering/>

Title: Towards Passive Analysis of Anycast in Global Routing: Unintended Impact of Remote Peering
Authors: R. Bian, S. Hao, H. Wang, A. Dhamdhere, A. Dainotti, and C. Cotton
Date: July 2019
Venue: ACM SIGCOMM Computer Communication Review, 49(3), p18
Keywords: routing, dns, topology

(10) <https://journals.sagepub.com/toc/jcrb/0/0>

Title: At Home and Abroad: The Use of Denial-of-service Attacks during Elections in Nondemocratic Regimes.
Authors: P. Lutscher, N. Weidmann, M. Roberts, M. Jonker, A. King, and A. Dainotti
Date: July 2019
Venue: Journal of Conflict Resolution, DOI: 0022002719861676
Keywords: passive data analysis, security, network telescope

(11) http://www.caida.org/publications/papers/2019/toward_theory_harms_internet/

Title: Toward a Theory of Harms in the Internet Ecosystem.
Authors: D. Clark and k. claffy
Date: August 2019
Venue: CAIDA
Keywords: overview, policy

(11) http://www.caida.org/publications/papers/2019/residential_links_under_weather/

Title: Residential Links Under the Weather
Authors: R. Padmanabhan, A. Schulman, D. Levin, N. Spring
Date: August 2019
Venue: ACM SIGCOMM Conference Proceedings
Keywords: active data analysis, measurement methodology, routing

(12) <https://dl.acm.org/doi/abs/10.1145/3355369.3355581>

Title: Profiling BGP Serial Hijackers: Capturing Persistent Misbehavior in the Global Routing Table
Authors: Testart, C., Richter, P., King, A., Dainotti, A., & Clark, D.
Date: October 2019
Venue: Proceedings of the Internet Measurement Conference (IMC'19)
Keywords: routing, security, topology

(13) <https://dl.acm.org/doi/10.1145/3355369.3355589>

Title: Learning Regexes to Extract Router Names from Hostnames

Authors: Luckie, M., Huffaker, B., & claffy, K.

Date: October 2019

Venue: Proceedings of the Internet Measurement Conference (IMC'19)

Keywords: measurement methodology, software/tools, topology

(14) https://link.springer.com/chapter/10.1007%2F978-3-030-44081-7_5

Title: To Filter or Not to Filter: Measuring the Benefits of Registering in the RPKI Today

Authors: Testart, C., Richter, P., King, A., Dainotti, A., Clark, D.

Date: March 2020

Venue: Proceedings of the Passive and Active Measurement. PAM 2020

Keywords: Internet security, Routing, RPKI, BGP

(15) https://doi.org/10.1007/978-3-030-44081-7_13

Title: Unintended Consequences: Effects of Submarine Cable Deployment on Internet Routing.

Authors: Fanou R., Huffaker B., Mok R., Claffy K.C.

Date: March 2020

Venue: Proceedings of the Passive and Active Measurement. PAM 2020

Keywords: measurement methodology, BGP, topology

(16) <https://dl.acm.org/doi/abs/10.1145/3402413.3402415>

Title: RIPE IPmap active geolocation: mechanism and performance evaluation

Authors: Du, B., Candela, M., Huffaker B., Snoeren, A. C., claffy K.

Date: April 2020

Venue: ACM SIGCOMM Computer Communication Review 50.2 (2020): 3-10

Keywords: measurement methodology, routing, topology

Presentations

1. *Meeting Name:* Workshop on Active Internet Measurements (AIMS)

Dates: March 13 - 15, 2018

Location: UC San Diego, La Jolla, CA

Attendees from the project: kc claffy, A. Dainotti, and M. Fomenkov

Presentations: A. Dainotti, ARTEMIS: Neutralizing BGP Hijacking within a Minute

(http://www.caida.org/publications/presentations/2018/artemis_aims/)

2. *Meeting Name:* CAIDA IMAPS Workshop

Purpose: Workshop on interdisciplinary research of political events that are visible through analysis of Internet measurement data

Dates: September 5 - 7, 2018

Location: La Jolla, CA

Meeting Attendees: kc claffy, A. Dainotti, A. King and M. Fomenkov

Presentations Made: A. King, "Realtime detection and analysis of Denial of Service attacks"

3. *Meeting Name:* [DHS 2019 S&T Cybersecurity and Innovation Showcase](#)

Purpose: To introduce DHS-funded research projects to government, industry technology implementers, investors, angel funders, and other potential market transition partners.

Dates: March 18 - 20, 2019

Location: Washington DC

Meeting Attendees: kc claffy, A. Dainotti, Alistair King

Presentations Made: A. Dainotti, "[HI-CUBE: Hub for Internet Incident Investigation](#)";

kc claffy, "[Advancing Scientific Study of Internet Security and Topological Stability \(ASSISTS DP\)](#)"

4. *Meeting Name:* Visit at DreamPort / Collaboration on BGP hijacking with Geiger-Gremlin team at Cyber National Mission Force

Purpose: To discuss methods and infrastructure for BGP hijacking detection and mitigation.

Dates: May 2-3, 2019

Location: DreamPort, Columbia MD

Meeting Attendees: A. Dainotti

Presentations Made: A. Dainotti, demos and excerpts from "[CAIDA's BGP Observatory](#)", "[Neutralizing BGP Hijacking with the ARTEMIS Open-source Tool](#)", "[Extracting Cybersecurity Metrics from Internet Mapping and Monitoring](#)"

5. *Meeting Name:* CAIDA's BGP Hijacking Observatory

Purpose: To discuss with and demo to the ISOC MANRS project lead our current work to develop and deploy CAIDA's BGP Hijacking Observatory.

Dates: August 8, 2019

Location: Conference Call

Meeting Attendees: A. Dainotti

Presentations Made: A. Dainotti, demo and excerpts from "[CAIDA's BGP Observatory](#)"

6. *Meeting Name:* Workshop on Darkspace and UnSolicited Traffic Analysis (DUST)

Purpose: To bring together researchers, operators, and analysts interested in unsolicited traffic analysis, especially traffic destined to unassigned (dark) IP address space.

Dates: September 9-10, 2019

Location: SDSC, UCSD La Jolla, CA

Meeting Attendees: kc claffy, A. Dainotti, E. Yulaeva, A. King

Presentations Made: A. Dainotti, "[HI-CUBE: Hub for Internet Incident Investigation](#)";

A. King, "[STARDUST – Sustainable Tools for Analysis and Research on Darknet UnSolicited Traffic](#)"

7.Meeting Name: ACM Internet Measurement Conference 2019

Purpose: IMC is a three-day event focusing on Internet measurement and analysis.

Dates: October 21-23, 2019

Location: KIT Royal Tropical Institute, Amsterdam, Netherlands

Meeting Attendees: A. Dainotti, A. King

Presentations Made: C. Testart, P Richter, A. King, A. Dainotti, D. Clark "[Profiling BGP Serial Hijackers: Capturing Persistent Misbehavior in the Global Routing Table](#)"

8.Meeting Name: ACM Internet Measurement Conference 2019

Purpose: IMC is a three-day event focusing on Internet measurement and analysis.

Dates: October 21-23, 2019

Location: KIT Royal Tropical Institute, Amsterdam, Netherlands

Meeting Attendees: A. Dainotti, A. King

Presentations Made: M. Luckie, B. Huffaker, K. claffy "[Learning to Extract Router Names from Hostnames](#)"

9.Meeting Name: Workshop on Active Internet Measurements: Knowledge of Internet Structure: Measurement, Epistemology, and Technology (AIMS-KISMET)

Purpose: To bring together researchers, operators, and analysts to discuss possible scenarios for the future of the Internet.

Dates: February 26-28, 2020

Location: SDSC, UCSD La Jolla, CA

Meeting Attendees: kc claffy, A. Dainotti, E. Yulaeva, A. King, J. Polterock

Presentations Made: A. Dainotti,"[CAIDA's BGP \(Hijacking\) Observatory](#)";
kc claffy, "CAIDA, and DHS IMPACT Program"

10.Meeting Name: Passive and Active Measurement Conference (PAM) 2020

Purpose: To bring together researchers and operators to discuss novel and emerging work in the area of network measurement and analysis.

Dates: March 30-31, 2020

Location: Online

Meeting Attendees: A. Dainotti,

*Presentations Made:*C. Testart, P. Richter, A. King, A. Dainotti, D. Clark "[To Filter or not to Filter: Measuring the Benefits of Registering in the RPKI Today](#)"