Proceedings

MADWeb 2021

Workshop on Measurements, Attacks, and Defenses for the Web

February 25, 2021
Virtual

Published by the

Internet Society
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Program Committee Chairs’ Message

The web connects billions of devices, running a plethora of clients and serving billions of users every single day. To cope with this widespread adoption, the web constantly changes with a stream of new technologies to develop web applications and ever-more complicated web browsers to render them. These rapid changes of the web’s ecosystem are not always studied from a security perspective, resulting in new attack vectors that were never observed before.

The Measurements, Attack, and Defenses for the Web (MADWeb) workshop aims to attract researchers that work on the intersection of browser evolution, web security, and large-scale measurements. Our goal is to create and sustain a new venue for discussing the rapid changes to web technologies from a security perspective, how we can protect users, and how we can make future browsers more secure without hindering the evolution of the web. To this end, we invited researchers to contribute to the third Workshop on MADWeb, co-located with NDSS Symposium 2021. This year the workshop received 25 submissions (56% more submissions than last year), which indicates the excellent growth and confirms our intuition that the research community wants a security and privacy workshop dedicated to the web. More specifically:

- 25 papers were submitted to the workshop, out of which the Program Committee selected 9 (36% acceptance rate).
- 33 Program Committee members supported the reviewing process, including prominent representatives of academic and industrial research.
- 1 paper was selected for the best paper award based on its outstanding review scores, and 2 additional papers were selected for the best paper runner-up award.
- One author of each submitted paper was offered financial support to cover the cost of workshop registration.
- 2 invited talks were scheduled (from academia and from industry) on the crucial topics of browser security and measuring and defending against phishing.

The wide range of topics covered by the accepted papers is remarkable, as it indeed covers all the three thrusts of the workshop, i.e., measurements, attacks, and defenses. In fact, we see that in addition to securing browsers, researchers focused on core infrastructure security (e.g., encrypted DNS), and on studying various new attacks, including cookie exfiltration and malicious content in social media platforms. We had a large number of attendees (more than 50 present online at each talk and Q/A session) and a very productive discussion at the workshop, and we expect that the number and diversity of web-related research topics will keep growing in future editions of MADWeb.

MADWeb’s paper awards and financial support for registrations were possible thanks to the sponsorship and generous support by Palo Alto Networks, Inc.

Oleksii Starov and Roberto Perdisci
Program Committee Chairs, MADWeb 2021
Organizing Committee

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