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# Advances in Cyber Security

Second International Conference, ACeS 2020 Penang, Malaysia, December 8–9, 2020 Revised Selected Papers



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#### **Preface**

This volume contains the papers from the Second International Conference on Advances in CyberSecurity (ACeS 2020). The event was organized by National Advanced IPv6 Centre, a research center at Universiti Sains Malaysia, Penang, Malaysia specializing in areas such as Cybersecurity, Internet of Things, Wireless Communication, and emerging network technologies.

In view of the current COVID-19 pandemic, ACeS 2020 was organized fully online with breakout sessions involving presenters and participants from around the world.

ACeS 2020 focused on existing and newly emerging areas in cybersecurity associated with advances of systems and infrastructures, lifestyle, policy, and governance. The conference encouraged the interaction of researchers, practitioners, and academics to present and discuss work on cybersecurity, especially in new, emerging domains such as the Internet of Things (IoT), Industry 4.0, blockchains, and cloud and edge computing.

The conference attracted a total of 132 submissions from countries including Bangladesh, Brazil, China, Croatia, India, Indonesia, Iraq, Jordan, Kingdom of Saudi Arabia, United Kingdom, Nigeria, Malaysia, Oman, Pakistan, and Yemen. All submissions underwent a strict peer-review and paper selection process which resulted in the acceptance of 46 submissions ( $\sim 35\%$  of the total submissions). The accepted submissions were virtually presented at the conference. All the accepted papers were peer reviewed by three qualified reviewers chosen from our scientific committee based on their qualifications and experience.

The proceedings editors wish to thank the dedicated organizing committee members and all reviewers for their contributions and commitment. We also would like to thank Springer for their trust and for publishing the proceedings of ACeS 2020.

December 2020

Mohammed Anbar Nibras Abdullah Selvakumar Manickam

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