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IFIP was founded in 1960 under the auspices of UNESCO, following the first World Computer Congress held in Paris the previous year. A federation for societies working in information processing, IFIP's aim is two-fold: to support information processing in the countries of its members and to encourage technology transfer to developing nations. As its mission statement clearly states:

IFIP is the global non-profit federation of societies of ICT professionals that aims at achieving a worldwide professional and socially responsible development and application of information and communication technologies.

IFIP is a non-profit-making organization, run almost solely by 2500 volunteers. It operates through a number of technical committees and working groups, which organize events and publications. IFIP's events range from large international open conferences to working conferences and local seminars.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is generally smaller and occasionally by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

IFIP distinguishes three types of institutional membership: Country Representative Members, Members at Large, and Associate Members. The type of organization that can apply for membership is a wide variety and includes national or international societies of individual computer scientists/ICT professionals, associations or federations of such societies, government institutions/government related organizations, national or international research institutes or consortia, universities, academies of sciences, companies, national or international associations or federations of companies.

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Vladimir Ivanov · Artem Kruglov · Sergey Masyagin · Alberto Sillitti · Giancarlo Succi (Eds.)

Open Source Systems

16th IFIP WG 2.13 International Conference, OSS 2020 Innopolis, Russia, May 12–14, 2020 Proceedings



Editors Vladimir Ivanov D Innopolis University Innopolis, Russia

Sergey Masyagin D Innopolis University Innopolis, Russia

Giancarlo Succi D Innopolis University Innopolis, Russia Artem Kruglov D Innopolis University Innopolis, Russia

Alberto Sillitti Innopolis University Innopolis, Russia

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Preface

This volume contains the papers presented at the 16th International Conference on Open Source Systems (OSS 2020) held during May 12–14, 2020, in Innopolis, Russia¹.

All of the submitted research papers went through a rigorous peer-review process. Each paper was reviewed by at least two members of the Program Committee. Only 20 were accepted as short papers with a 47% acceptance rate.

Open Source Software (OSS) development has emerged in the last decades as one of the most important phenomenon of computer science and engineering. It has been instrumental for education and research in academia, providing free access to essential tools such as compilers, word processors, spreadsheets, etc.; it has changed the way people perceive the software business and it has often kept the software market away from monopolies. As such, a deep understanding of OSS requires the understanding of a wide spectrum of issues. Therefore, OSS 2020 provided a forum to discuss theories, practices, experiences, and tools on development and applications of OSS systems, with specific focus on two aspects: (a) the development of open source systems and the underlying technical, social, and economical issues, and (b) the adoption of OSS solutions and the implications of such adoption both in the public and in the private sector. OSS 2020 brought together researchers from industry, public administration, and academia to share experiences and ideas, and to provide an archival source for important papers on open source topics. The conference provided information and education to practitioners, identified directions for further research, and will be an ongoing platform for technology transfer.

We hope that you find the OSS 2020 proceedings useful for your professional and academic activities, and that you enjoyed the conference. Finally, we would like to thank all the people who have contributed to OSS 2020 including the authors, the sponsors, the reviewers, the volunteers, and the chairs.

March 2020

Vladimir Ivanov Artem Kruglov Sergey Masyagin Alberto Sillitti Giancarlo Succi

¹ Due to the COVID-19 pandemic, the conference was held virtually.

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