Conference tracks and workshops that focused on cutting-edge technologies, and a record-breaking audience that ranged from CIOs, tech heads and evangelists to academicians, DIYers and students, were the hallmarks of this year’s edition of Open Source India. Here’s a quick review of all that happened over two days in October at Bengaluru.
The 15th Edition of EFY Group’s annual open source conference, Open Source India (OSI), was hosted on October 11 and 12 this year at NIMHANS Convention Centre, Bengaluru. This much awaited event had 8 tracks and 12 workshops focused on the trending technologies in open source, with over 70 remarkable speakers from various top companies.

“All thanks to the Open Source community and the industry that we had the best edition of open source India, yet.” said Rahul Chopra, editorial director, EFY Group.

Here’s what happened
For 15 years, the mission of Open Source India has been to accelerate the development and deployment of open source software. This year, too, the event achieved many new milestones, while focusing on avenues and opportunities in the open source field.

In 2018, the event witnessed a record-breaking attendance of more than 2300 open source supporters and practitioners from India and around the globe. Attendees took away a wealth of information and hands-on training on the latest open source technologies and developments.

The profile of visitors included developers, IT managers, CIOs, senior tech heads, business leaders and academicians. Apart from the professionals, the convention was well attended by many evangelists, entrepreneurs, enthusiasts and students who were anxious to know more about what’s new in the world of open source.

The star keynote speakers comprised Tomas Ulin (vice president, MySQL Engineering, Oracle), Sandeep Alur (director - partner engagements, Microsoft), Pradeep Balachandran (programme director, IBM), Krishna M. Kumar and Sanil Kumar D. (chief architects, cloud, Huawei India), Divyanshu Verma (senior engineering manager, Intel R&D), Srinivasan Ravindran (programme head - FOSS Technologies, ICFOSS, government of Kerala), Karthik Padmanabhan (developer relations - lead, Google India) and Sohan Maheshwar (Alexa evangelist, Amazon), who inspired the attendees with their experiences and valuable suggestions on the best practices to start with.

Engaging and trending topics like, ‘Why Voice is the Next Major Disruption in Computing’, ‘The World of Ubiquitous Computing and Artificial Intelligence’, ‘Security Transformation in Today’s Digital World’, ‘Smart Email Systems with Split Delivery’ and many more, made sure the audience stayed glued to its seats till the evening, on both days of the event.

To add some fun and get people out of the rut of a typical conference routine, the event was injected with a dose of laughter, with Atul Khatri performing at the venue in the evening of the first day. This techie turned stand-up comedian had the audience explode with laughter in a matter of minutes.

The team behind Open Source India made sure that the event had something in store for every kind of open source practitioner. While the software developers updated themselves on the latest technologies, tools and best practices emerging from the field of open source, the IT infra managers were able to discover open source solutions and tools that would empower them to manage IT better.

The event also helped senior tech decision makers on which technology stacks, solutions and partners to bet on – for the future growth of the organisation. By networking with their peers at the event, business decision makers discovered more ways in which they could grow their businesses using open source technologies, and discovered new partners and principals to do business with. The academicians, enthusiasts and DIYers are essential to the buzz around OSI – so they were invited to join in and showcase the projects they were part of.
WHAT DELEGATES SAID ABOUT OPEN SOURCE INDIA 2018

Ravi Trivedi, founder, PushEngage
Open Source India 2018 was a unique experience for me and my team. We shared our knowledge on secure programming in a workshop with the audience, and found a very engaging and eager-to-learn crowd. We also attended the conference, and learned about the latest developments in databases, and the DevOps processes. Overall, it was a great learning and sharing experience for us. Well done Team Open Source India, for putting together such a conference.

Pethuru Raj, chief architect and vice president, Reliance Jio Infocomm Ltd
The conference ambience was so nice and neat, the attendees were so enthusiastic in all the activities, the organisers did a great job in arranging everything perfectly and precisely, and there were more than enough exhibition and demo stalls. In short, the whole experience was memorable and mesmerising.

Srinivasan Ravindran, programme head - FOSS Technologies, ICFOSST, government of Kerala
There has been a qualitative increase in the type of delegates attending OSI since the past few years. This year I see that the audience comprises not just people who want to know about open source but are the ones who are implementing it and already have knowledge about it. This was quite interesting as well as challenging. The second thing is that the talks were niche and indicated the track open source is going to take in the next few years.

Vinod Panicker, chief architect, open source and Blockchain solutions, CRS practices, Wipro
I would definitely say that Open Source India is an event all open source enthusiasts must attend. The tracks this year were very well conceptualised. It was different, and it should continue in the same way in the future too, by including more communities. The most important thing is the scale at which the team has worked to put together such an event—it was amazing. The team has done a great job.

Gurpreet Sachdeva, AVP technology, Aricent
This is my first time at Open Source India and I am very happy to be here because I see a bunch of energetic people who are very eager to learn and network! I see that the rooms are full and the expo area is crowded only during breaks. I can clearly say that people have come here to learn and are enjoying it. It is a very well organised event.

Krishna M. Kumar and Sanil Kumar D., chief architects, cloud, Huawei India
We have been attending Open Source India since 2011, and we see a tremendous improvement in this conference every year. This is the platform for all open source contributors to come and check out where they stand, network with others and find out how to improve their credibility and confidence. The exhibition booths are amazing this time. In India, we need more such conferences. We really believe the event lives up to its billing of being Asia’s No. 1 open source conference.

Sandeep Alur, director, partner engagements, Microsoft
This is my third year at Open Source India. Every year I see more people coming in. The folks who come are those who truly believe in open source. There is no other conference that I have come across in the country that showcases open source software and conducts such an annual conference. I personally love this, especially because this is one platform where I get to interact with many people who are already in the open source world and want to understand from us what we do.

Shreya Sharma, technical product manager, Expedia Inc.
The one thing that distinguished OSI for me is that it was not attached to any brand. It seemed a little more neutral and generic. Over the course of the talks I also realised the quality is incredibly good. Most of the people are talking about absolutely cutting-edge technology. The quality is amazing.

Avanish Panchal, technical architect, Technosoft Corporation
This is my first time at Open Source India and from the first day itself, the quality of speakers has been very good. The event is professionally managed, and it was indeed a pleasure to be part of Open Source India.
Open Source India 2018

KEY TRACKS AT OPEN SOURCE INDIA 2018

Open Source and You
This was a day-long packed session with various interesting talks like, ‘The Efficacy of Open Source in the Governance Space’, ‘How You too can Find the Needle in a Haystack’, ‘How to License and Monetise Open Source Libraries/Software’, etc. Eminent speakers at this track included Kanika Gera (technical product manager, Adobe Systems), Shreya Sharma (technical product manager, Expedia Inc.), and Abhishek Jain (CTO, eGov Foundation), among others.

Application Development
This was a full-day session with multiple talks on application development that included ‘Building Intelligent Information Search Systems’, ‘WebRTC – The Changing Communication Paradigm’, ‘Build Web and Mobile Apps Rapidly on the Cloud using a Browser’, etc. The speakers at this track were Ram Iyengar (manager, developer relations, Zoho), Monika Kumar Jethani (senior software engineer, PricewaterhouseCoopers), Rajesh Gudikoti (software architect/developer advocate, IBM) and many others.

The Cloud and Big Data
This was a half-day session with talks on how the cloud and Big Data are transforming the industry. Some of the amazing talks included ‘Managing Microservices with Istio’, ‘Data Analytics through Apache CarbonData+Spark’, and ‘Fabric for Deep Learning’. The speakers at this track included Parveen Kumar (technical solutions professional, Azure, Microsoft), Dipanjan Ganguly (Big Data analyst, Taashee Linux Services) and Muthuramakrishnan Viswanathan (technical solutions consultant, Google).

Cybersecurity Day
This was a half-day track with multiple talks on how security is transforming the digital world today. Talks in this track were ‘Securing and Auditing Smart Contracts’, ‘Block Chain Based Cybersecurity Solutions’, and ‘Demystifying SELinux for Server, Mobile and Container Applications’. The speakers here included Prasanth K.S.R. (software senior engineer, Dell EMC), Valan Sivasubramanian (manager - systems engineering, Fortinet), Vinod Panicker (chief architect, open source and Blockchain solutions, CRS practices, Wipro) along with many others.

Database Day
This was a full-day track covering various database management systems. The speakers included Manosh Brabagar Malai and Kabilesh P.R. from Mydbops, Prabhu Eshwarla (founder, SudhanvaDLT), Avanish Panchal (technical architect, Technosoft Corporation), Prasad Nagaraj (VP, engineering, ScaleGrid), Raghavendra Deshpande (developer advocate, IBM) and many others.

DevOps Day
This was a half-day track that helped all DevOps users to get an idea about its background, security, life cycle and tools. A few of the topics discussed included ‘Cloud Native Storage and Best Practices to Achieve Data Agility in DevOps’, ‘How to Easily Keep Dozens of Code Repositories Consistent’, and ‘DevOps – Lifecycle, Tools and a Unified Platform’. The speakers included Siva Rama Krishna (technical director, Oracle), Gurpreet Sachdeva (A VP technology, Aricent), Umasankar Mukkara (COO, MayaData) and many others.

OpenStack Mini Conference
This was a half-day session with multiple talks ranging from an introduction to monitoring of OpenStack. A few of the talks covered ‘OpenStack - From Open Source Project to Enterprise Grade Distribution’, ‘The New OpenStack Deployment Era: Non-Containerised to Containerised with Kolla’, ‘Monasca - OpenStack Monitoring as a Service’, and many more. The speakers included Pandiyam Muthuraman (cloud engineer, Reliance Jio), Surya Prakash Singh (contributor, OpenStack), and Shreshtha Joshi (senior software engineer, Red Hat) along with many others.

Manage, IT. Smart
This was a full-day track on smart IT management with multiple talks on hyperconvergence, IT security, the smart cloud and data centre management. The speakers included Murali Malladi (engineering director, platform solutions, Nutanix), Abhijith B.R. (senior security analyst, Ernst and Young), Sandeep Athiyarath (founder and director of FCOOS Technologies Pvt Ltd), Anil Bidari (founder and CEO, Cloud Enabled) and Jacob Singh (chief technology officer, Grofers).
KEY WORKSHOPS AT OPEN SOURCE INDIA 2018

LEARN TO DEVELOP VOICE-ENABLED EXPERIENCES WITH ALEXA
This hands-on workshop took the participants through the skills-building process, starting with an introduction to Amazon Alexa and the Alexa Skills Kit while illustrating why voice is the next major disruption in computing. The instructor for this workshop was Sohan Maheshwar, Alexa evangelist, Amazon, who inspires and helps developers build incredible voice experiences using Alexa.

HACKING, HARDENING AND SECURING: AN OVERVIEW FOR DEVELOPERS
The phenomenal rise in technology, and especially software-driven products (in domains like networking, telecom, embedded-automotive, infotainment, and now, IoT, ML and AI), literally begs for better security on end products. This workshop was geared towards helping participants understand why and where software vulnerabilities exist. Kaiwan N. Billimoria, the founder of KaiwanTECH, was the instructor for this workshop.

SECURE PROGRAMMING – HOW TO WRITE SECURE CODE WHICH AVOIDS SECURITY VULNERABILITIES
In this age of continuous technological innovation, there are new methods of hacking and breaking systems that are evolving constantly. The presenters for this workshop were all from PushEngage – Ravi Trivedi (founder), Sampath Kumar S. (software lead), Ayushi Dubey (software developer), and B. Radha Krishna (senior software engineer).

VULNERABILITY ASSESSMENT AND PENETRATION TESTING (VAPT)
This workshop was an eye opener for those inclined towards cyber security. It briefly covered topics like the need for VAPT, network scanning using Nmap, and vulnerability scanning using the Nmap/OpenVAS/Metasploit-framework, etc. The instructor for this workshop was Piyush T. (security researcher at PurpleSynapz).

HANDS-ON ETHEREUM: DEVELOPING SMART CONTRACTS WITH SOLIDITY
The success of Bitcoin and Ethereum has created much interest in blockchain technology. This workshop provided a technical overview of Ethereum, which is one of the most popular open source blockchain platforms for writing smart contracts. The instructor was Murughan Palaniachari, Principle Consultant, Blockchain & DevOps (CodeOps Technologies).

AN INTRODUCTION TO CONVOLUTION NEURAL NETWORK (CNN) AND TENSORFLOW
This workshop introduced the Convolution Neural Network (CNN) and Tensorflow. Attendees could learn how CNN works and how to install Tensorflow. The presenters for this workshop were Shuvaday Chatterjee, Anusha Bhaskar and Priti Parate (software senior engineer, Dell R&D).

AN EFFECTIVE DEVOPS PIPELINE FOR BLOCKCHAIN
A blockchain is immutable and hence the smart contract deployed in a blockchain network is irreversible. This session demonstrated how to build an effective DevOps pipeline for blockchain that can alleviate these risks. The presenter for this workshop was Jeeva S. Chelladhurai (founder, Comorin Consulting Services).

OSS LICENCE COMPLIANCE WITH OSS TOOLS
The main objective of this workshop was to spread awareness about OSS compliance. It introduced the participants to OSS licence compliance and its importance. The presenter for this workshop was Arun Azhakesan (lead – compliance, Siemens Healthineers) and Supriya Ashish Chitale (manager - product development, Siemens Technology and Services Private Limited).

A HANDS-ON WORKSHOP ON HYPERLEDGER FABRIC USING THE IBM CLOUD CONTAINER (KUBERNETES) SERVICE
This workshop demonstrated the steps involved in setting up a business network on Hyperledger Fabric using Kubernetes APIs on IBM Cloud Container Service. The presenters for this workshop were Mangesh Patankar and Raghavendra Deshpande (developer advocates, IBM).

MACHINE LEARNING ON THE CLOUD
This workshop took participants through the journey of cleaning and visualising data, and finally deploying machine learning models in a quick hands-on session, without much code and using some very exciting data sets. The presenter for this workshop was Krishna Balaga (developer advocate, IBM).

MONOLITH TO MICROSERVICES: A HANDS-ON WORKSHOP FOR THE DEVELOPMENT OF MICROSERVICES USING OPEN SOURCE FRAMEWORKS
This workshop was aimed at enabling developers to transform their monolithic applications to microservices using open source microservices frameworks. The presenters for this workshop were Mohammad Asif Siddiqui, Rajadeepan D. Ramesh, Savita, Thandayuthapani S. and Mahesh Raju, all from Huawei.
Open Source India 2018

01: Sandeep Alur, Director, Partner Engagements, Microsoft
02: Sohan Maheshwar, Alexa Evangelist, Amazon
03: Anupam Ghosh, Team Lead, Siemens Technology and Services
04: Anish Mathew, Marketing Manager, Zoho
05: Parveen Kumar, Technical Solution Professional, Azure, Microsoft
06: (Left to right): Sandeep Alur, Director – Partner Engagements, Microsoft; Srinivasan Ravindran, Programme Head - FOSS Technologies, ICFOSS, Government of Kerala;

Divyanshu Verma, Sr Engineering Manager, Intel R&D; Karthik Padmanabhan, Developer Relations -Lead, Google India
07: Tomas Ulin, Vice President, MySQL Engineering, Oracle
08: Sanil Kumar D., Chief Architect Cloud, Huawei India
09: Attendees at the registration counter
10: Dipanjan Ganguly, Big Data Analyst, Taashee Linux Services
11: Jeeva S. Chelladhurai, Founder, Comorin Consulting Services
12: Mangesh Patankar, Developer Advocate, IBM
13: Pradeep Balachandran, Program Director, IBM
14: Muthuramakrishnan Viswanathan, Technical Solutions Consultant, Google
15: Vinay Agarwal, Consulting Product Manager, Oracle
16: Abhishek Jain, CTO, eGov Foundation
17: Krishna Balaga, Developer Advocate, IBM
18: Krishna M. Kumar, Chief Architect Cloud, Huawei India
19: Shreya Sharma, Technical Product Manager, Expedia Inc.
20: Prasanth K.S.R., Software Senior Engineer, Dell EMC
21: Raghunandan, Chief Architect, Huawei’s India R&D
22: Venkata Ramana, Lead Architect, Huawei’s India R&D
23: Abu Kurian, Head – Communication, *astTECS
24: Raghavendra Deshpande, Developer Advocate, IBM
25: Piyush T., Security Researcher at PurpleSynapz
26: Keshav Peswani, Software Engineer, Expedia Inc.
27: Punith P., Software Engineer, Dell EMC
28: (Left to right): Tarun Dua, Co-Founder, E2E Networks; Rushabh Mehta, Director and CEO, Frappe Technologies and ERPNext; Frederick Noronha, Journalist (Moderator); Abhas Abhinav, Founder, DeepRoot Linux

29: Mohammad Asif Siddiqui, Technical Project Leader, Huawei

30: Ranga G.K., TSP, Open Source, Microsoft

31: Rajesh Sola, Education Specialist, KPIT Technologies, Pune

32: Vinod Panicker, Chief Architect, Open Source and Blockchain Solutions, CRS Practices, Wipro Limited

33: Supriya Ashish Chitale, Manager, Product Development, Siemens Technology and Services Private Limited

34: Valan SivaSubramanian, Manager - Systems Engineering, Fortinet

35: Kanika Gera, Technical Product Manager, Adobe Systems

36: Monika Kumar Jethani, Senior Software Engineer, PricewaterhouseCoopers

37: Pulkit Agarwal, Sr Product Manager, Microsoft

38: Sachin Bhakar, Open Source Compliance, Honeywell
39: Kaiwan N. Billimoria, Founder, kaiwanTECH
40: (Left to right): Ramakrishna Rama, Director - Software, Dell; Murali Malladi, Engineering Director, Platform Solutions, Nutanix; Mohammed Hayath, Head of Systems Engineering, VMware; Raveendra Babu Madala, Dell EMC, in a panel discussion on Hyper-Converged Infrastructure
41: Delegates at the CNCF booth
42: Janardan Revuru, Advisor, Open Source India, at the app development track
43: Vijay Bhat, Senior Database Engineer, Taashee Linux Services
44: Shuvaday Chatterjee, Software Senior Engineer, Dell R&D
45: Murughan Palaniachari, Principle Consultant, Blockchain & DevOps, CodeOps Technologies, taking a workshop
46: Ravi Trivedi, Founder, PushEngage, conducting a workshop along with his team
47: Arun Madhavan, Program Head, ICFOSS
48: Rajesh Gudikots, Software Architect/Developer Advocate, IBM
49: Manosh Brabagar Malai, Senior DevOps and DB/Cloud Consultant, Mydbops
50: (Left to right): Srivathsa N.S., Engineering Director, Unisys India Technology Centre; Abhijith B.R., Sr Security Analyst, EY; Jacob Singh, Chief Technology Officer, Grofers; Pethuru Raj, Chief Architect and Vice President, Reliance Jio Infocomm Ltd
51: Gurpreet Sachdeva, Assistant Vice President – Technology, Aricent
52: Kabilesh P.R., Co-Founder, Mydbops
53: Siva Rama Krishna, Technical Director, Oracle
54: Surya Prakash Singh, Contributor, OpenStack
55: Shresath Joshi, Senior Software Engineer, Red Hat
56: Prabhu Eshwarla, Founder, SudhanvaDLT
57: Delegates in deep discussion at the Microsoft booth
58: Pandiyan Muthuraman, Cloud Engineer, Reliance Jio
59: Avanish Panchal, Technical Architect, Technosoft Corporation
60: Vincent FUCHS, Technical Architect, Societe Generale GSC
61: Amar Prusty, Cloud Architect, DXC Technology
62: Umasankar Mukkara, COO, MayaData
63: Delegates at the Amazon Alexa booth