OpenTechSummit Thailand 2019 - Oct.2, Day 2

OpenTech SUMMIT

Day 2 / Track Cloud, Containter, DevOps in Room X1AB (Floor 10)

Time	Speaker	Title	Description
9:00	Rushil Sharma; Rutvik Kshirsagar	Openshift 4 the hybrid cloud market disruptor	Openshift 4 is the latest Enterprise Kubernetes solution unlike any other in the market. This session will include hands on demonstration of OpenShift 4.1 on Red Hat Enterprise Linux, CoreOS
9:30	Ploy Chanprasert	Personal Data Monitoring Tool in Southeast Asia: Opportunities for Data and Privacy Protection in the Overlooked Region	The session has an objective to explore possibilities of having a personal data monitoring tool is free, easy to use, and open source for general public in Southeast Asia where efforts on cybersecurity and personal data and privacy protection are still limited. Many data breach incidents have not been handled properly looking at it from human rights perspectives. There are times that affected individuals are told to changed their passwords only without knowing where their personal data goes compared to those in the first world countries where personal data monitoring service is offered. The tool, if there is a possibility to develop, would help protect people in data breach incidents in Southeast Asia. The session aims to discuss the possibility to develop this tool from technical perspectives.
10:00	Santosh Viswanatham	Writing Javascript with Better Performance	We have been writing Javascript for almost two decades now and it is showing up everywhere, including mobile apps, Servers, Devices, and Robots. But, Did you ever thought about the performance of your Javascript? or if there is still a better way to write JS which is faster? In this session, I will talk about the lessons I learned after cleaning up a 5-year-old code-base, proper ways to write your Javascript code, How handling typecasting, shortening scope chains, function chaining will improve the performance, How the usual way we do operations is not the fastest way to do it. I will also talk about How writing unnecessary steps can be expensive, and using supersets like Typescript can improve your code quality and performance. I will compare the performance of different approaches, and introduce tips and tools to validate the performance.
10:30		Coffee Break	
11:00	Prathan Thananart	Towards Container Platforms and Serverless Solutions	Docker and Kubernetes have ushered in an era of container Platform as a Service solutions. This talk compares homegrown cluster deployments against various offerings from cloud providers including ECS, EKS, GKE, and GCR.
11:30	Somsak Sriprayoonsakul	How open-source software help ByteArk scale 5 times to achieve almost a million concurrents.	ByteArk is a CDN platform providing services video streaming & web-site. The platform has passed a certain milestone that the platform could withstand almost a million concurrent viewers in a single event by scaling the platform 5 times of its former capacity in around 2 months. This presentation will share the details on how open-source software help achieve this milestone.
12:00	Andrew Lee 李健秋	An infrastructure on containers to build your own Debian based distro	It is impressive how much time and resources a team can save by using the OBS infrastructure to manages their packages creation and distribution. OBS is a generic system to build and distribute packages from sources in an automatic, consistent and reproducible way.This presentation will help existing and new software projects and independent software vendors better understand how to use morden infrastructure to maintain your packages and repositories for multiple distributions and architectures collaboratively. And will hopefully encourage more software projects and independent software vendors to use such infrastructure to provide repositories for user to keep track their updates easily, and for developers to collaboratively work and contribute easily to the packages and repositories.
12:30		Lunch Break (Floor 9, Cafeteria)	

Day 2 / Track Open Tech in Room X1AB (Floor 10)

Time	Speaker	Title	Description
14:00	Jinal Foflia	Driving South East Asia Forward with OpenStreetMap	It's been more than a year since we at Grab incorporated OpenStreetMap into our ecosystem and we have come a long way since then. This talk will focus on our learning journey, our tools, the challenges and our experiences working in the South East Asia region and the vibrant OpenStreetMap communities here.
14:30	Alliya Moun-ob	OpenStreetMap for TreeMapping	WWF's Living Planet Report 2018 revealed that wildlife populations have dropped on average by 60% within the past 50 years. We think of a few rare and iconic species being at risk of extinction, but the report shows that the whole natural world is feeling the impact of human activity.The same report sets out a vision for worldwide action to 'bend the curve' and reverse this decline in wildlife populations by 2030.We can all play a role in monitoring the health of our local environment. Without knowing what wildlife inhabits an area we have no way of knowing the impact changes to the environment might have on biodiversity. Wildlife might be declining because of things we are doing - or not doing - and we could have no idea that this was happening until the entire ecosystem was irreparably damaged. Learning About our local biodiversity empowers us with the knowledge we need to make informed decisions about how to protect and restore the natural world around us.Trees survey and mapping will help children to seek and learn about their biodiversity and how it supports wildlife in urban area. Moreover, the tree height and diameter can tell us how much carbon it contains and contributes to climate change. All data they have learnt will inspire them to value their neighbor green area and protect it.
15:00	Supawat Pugkhem	Blockchain implementation for government sectors for its partners in healthcare system	In healthcare system, the government sectors need information exchanges among its parties such as manufacturers, distributors, hospitals and pharmacies. By using blockchain platform, all parties will exchange their information via blockchain platform automatically. This implementation helps to automate the information exchange processes from partner's Enterprise Resource Planning system (ERP system) to government's ERP system via blockchain Therefore, by using this solution, there will be no offline information sending nor receiving among them. This solution will help to make sure that the results of the information exchange are faster, more accurate, more reliable and more transparent as well as reducing the cost of process to put the information offline and online.The implementation takes care of all the security aspects, a proper Public Key Infrastructure (PKI) is used throughout the system including encryptions to secure the communication and verify the identity via digital signature. All information is prepared from ERP automatically in agreed XML format, then is signed, encrypted and sent to blockchain platform via SOAP/RESTFUL API. At the other end, the information is received, then unencrypted, identified and then sent to ERP system automatically.The result of this implementation via using blockchain is very successful with partners and this will become the standard of communication between the government and its parties in healthcare in this coming year.
15:30		Coffee Break	

Time	Speaker	Title	Description
16:00	Su Myat	Dependency Injection with Kotlin vs Dagger	Dependency Injection is mainly used for the control and management of dependencies. Koin is a simple and powerful dependencies injection library. It's written with Kotlin. This topic will cover what Koin is, compare with Dagger and how to use it. In order to properly compare the two implementation options, firstly will focus on a project that Implemented first with Dagger and now with Koin.
16:30	Klaikong Vaidhyakarn	Open Government and eCitizen Engagement	This talk is about Open Data and people's participation through digital platforms in multiple levels, as followers to civic hackers and how governments and political parties can benefit form Free and Open Source Software.
17:00	Mishari Muqbil, Mario Behling	Event Closing	This was OpenTechSummit Thailand 2019
16:55		End of Track	

Day 2 / Track Open Hardware and Production in Room X4B (Floor 10)

Time	Speaker	Title	Description
9:00	Nontawit Markjan	Transfarmer: Open source makes agriculture do more	Transfarmer is the smart hydroponics farm project that integrated technologies with the agriculture follows by the industrial standard ANSI/ISA95. It consists of 3 main parts which are 1. hardware - planting and harvesting system, fertilizer control, and environmental monitoring 2. server - the medium that connect hardware and application to work together and 3. application/dashboard - users can real-time monitor the status and control their farm to plant or harvest at anywhere in the world.
9:30	Nguyen Hong Quan	Application of open tech in an IoT platform for agriculture	The major advantage of an IoT platform for farming is the integration into a one platform to control farming decisions such as irrigation system control, fertilization, pesticides, and an open data network. How we apply open tech from various levels (operating system, embedded system, database, programming language, web framework) to build up an IoT platform for mushroom farm, which then expand to hydroponics and swiftlet house.
10:30	Cristian Guajardo	Building a wax printer for the fabrication of chemical analysis devices	In the last decades, chemical analysis has been moving from the laboratory to hand-held devices, of which the glucose meter (for diabetes pacients) and pregnancy test are two successful examples. Paper-based microfluidics is a new technology that holds the promise of removing expensive and cumbersome instrumentation from chemical analysis devices, while still performing sophisticated medical and agricultural diagnostics. These devices are commonly fabricated using paper containing fluid channels made out of wax, which conduct the liquid sample during the analysis. In this talk, we tell our experience of adopting free and open source technology to modify an existing design of wax printer, and to use it as an student project for our laboratory.
10:30		Coffee Break	
11:00	Nat Weerawan	Chiang Mai Maker Club: An open source community & maker space in CNX	Nat will be talking about the ups and downs of community-building; curation of tech content, connecting people, building teams out of volunteers from scratch, and the challenges of making the concept of 'makers' more known to society. Moreover, the talk will also touch upon how conventional education faces a challenge to build capabilities that correspond to fast-moving technological advances — mainly why building learning communities like Maker spaces is crucial.
11:30	Kee Wee Deng	CraftLaser - the open source laser cutter	The CraftLaser is the first Full-metal enclosure CO2 laser cutter that provides maximum protection to you and your family, much like owning a Blu-ray Player, it is a Class 1 Laser equipment. The CraftLaser is lightweight and has a luggable design that makes it the only CO2 laser cutter that is stowable and perfect for users with limited space. Also, you do not need to plug in an extra air extractor (also means you don't need to be close to a window or door to vent the extracted air) and you also do not need to plug in an external cooling system to use it. No ugly water pipings and pails of water to deal with.
12:30		Lunch Break (Floor 9, Cafeteria)	
14:30	Marc Dusseiller Dusjagr	From Open Source Biological Art to DIY scientific instruments	In this session, Dr. Marc Dusseiller will present his projects around hackteria, how it lead to GOSH larger network and the specific DIY science instruments by GaudiLabs.
15:00	Wei Tat Chung	Pocket Science Lab	Pocket Science Lab is a complete platform that is fully open source in every layer; hardware and software. Looks may deceive you thinking it's another Arduino device but you would be amazed to see what it can do. This tiny device can literally replace a room full of electronic analytical tools with its 4 channel oscilloscope, logic analyzer, multi-meter, wave generator and many more instruments it got. With a PSLab in hand, you wouldn't need to know any software programming to use and take readings from almost any sensor you got. PSLab got it all. In this session I am going to show you all of it.
15:30		Coffee Break	
16:00	Andrew Tse	Mass production of hardware and getting it into the hands of your customer	You've spent months on the prototype, rehashing, redesigning, testing and breaking and now you have a product you are happy is market-ready. The hard work is not yet over. How do you then take the step of getting it mass manufactured, packaged and delivered to a fulfilment warehouse or direct to your customers?The making of a multiple products at scale is not the same as fabricating the prototype. The components may be the same, but the process is not. So what could have worked wonderfully for the prototype may fail disastrously for the finished product. Some companies are under such pressure to fulfil orders or hit production deadlines that they rush this step and what they thought was just a replication of the working prototype instead becomes a mad dash with invariably quality issues. Often it's because the developer has spent too long perfecting the product or software, and they impatiently just want to see their baby on the shelves, but insufficient time is left for the actual factory production. I'd like to talk through some of the pitfalls of production, quality control and then packaging and logistics to get the final product to market. I hope that some of the lessons will make your life easier in developing and finishing your products and giving your customer the best experience possible.
16:30	Khomdet Phueadphut	KBIDE: Opensource & Hackable IDE for hardware developers.	KBIDE is a tool for embedded board development [types esp32 and arduino-avr]. Its coolest feature allows beginners to learn programming using blocks without having to worry about complicated syntax. Moreover, more elaborate users can also choose to code with C/CPP Language to unlock its full potential. Other key features include efficient compulation, ease of plug-in use, and customizable IDE. But what is the logic behind building this user-friendly tool? All its workings is backed with Electron and VueJS, a Compiler coded by NodeJS, developed as a WebApp - all-in-all which makes it an ease for all users. Not to mention that this amazing tool is 100% Open-source.
16:55		End of Track	

Day 2 / Track Internet Universality in Room X11.7 (Floor 11)

Time	Person	Topic	Description
9:00	Mr Ekapong Rimcharone, Executive Director, Office of the National Digital Economy and Society Commission Dr. Pun-Arj Chairatana, Executive Director, National Innovation Agency Mr Shigeru Aoyagi, Director, UNESCO Bangkok Office	Welcome address and opening remarks	
9:30	Ito Misako, Adviser for Communication and Information, UNESCO Bangkok	UNESCO's Internet Universality Indicators: A Framework for Assessing Internet Development	UNESCO will present the key media trends as highlighted in the World Trends in Freedom of Expression and Media Development 2017-2018 Report and the relevance of Internet Universality ROAM-X Model as a framework for addressing the pressing challenges and assessing Internet development in countries.
10:00	Ito Misako, Adviser for Communication and Information, UNESCO Bangkok	Q&A	
10:15		Coffee Break	
10:30	Dr Simon Ellis, International Expert, UNESCO Dr Pirongrong Ramasoota, Chulalongkorn University Mr Arthit Suriyawongkul, Thai Netizen Network	Internet Universality in Thailand	Pilot assessment of Internet Universality in Thailand was undertaken between July and September 2018 and the report was completed jointly by the national research team and UNESCO international expert. The researchers will present the research methodology and the key findings of the assessment based on the application of Internet Universality Indicators in Thailand. The presentation will also highlight areas where improvements can be made regarding Internet Universality in Thailand.
11:30	Dr Simon Ellis, International Expert, UNESCO Dr Pirongrong Ramasoota, Chulalongkorn University Mr Arthit Suriyawongkul, Thai Netizen Network	Q&A	
12:30		Lunch	
13:30	Group work	Categories for the indicators of Internet Universality	The participants will be divided into 5 groups to discuss and comment on the 5 Categories of the indicators in the draft report. Questions to be addressed by each group include: Does this category present an accurate overview of Internet in Thailand? If not which indicators require improvements? Why? Where are the data gaps? Who/which institutions can address the gaps? What recommendations can you make on this Category of the indicators for the development of Internet in Thailand to meet the ROAM principles?
15:30		Coffee Break	
15:45	Plenary presentation	Presentations by group The way forward Concluding remarks	
16:55		Participants move to main room for closing	
17:15		End of Event	

Day 2 / Track - Break-out/Hands-On (Floor 10) - X03

Time	Person	Topic	Description
9:00		Open Space	Get together for a adhoc workshop, developer discussion or breakout session. The space is available for group of participants to discuss specific subjects or aspects of Open Source project, to learn hands-on, or work together on projects.
10:30		Coffee Break	
11:00		Open Space	Get together for a adhoc workshop, developer discussion or breakout session. The space is available for group of participants to discuss specific subjects or aspects of Open Source project, to learn hands-on, or work together on projects.
12:30		Lunch	
14:00	Welearn Team	Unplugged coding demonstration workshop	Fun kids activities to learn coding without a computer. Unplugged STEM activities for Hour of Code, computer porgramming class, elementary school students.
15:30		Coffee Break	
16:00		Open Space	Get together for a adhoc workshop, developer discussion or breakout session. The space is available for group of participants to discuss specific subjects or aspects of Open Source project, to learn hands-on, or work together on projects.
17:30		End of Track	