



OpenShift Commons 2020

Building Bridges Between Open
Source Communities

fooss
asia

Founder at FOSSASIA (Asia)
Vice President at Open Source
Initiative (America)
InnerSource @Zalando (Europe)

Hong Phuc DANG
@hpdang



Build a Better World
with Open Technologies

fossasia

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labs.fossasia.org

Open Source
Software &
Hardware Product
Development

events.fossasia.org

Open Source
Events

codeheat.org

Open Education,
Academies and
Coding Programs

fossasia

labs.fossasia.org

Open Source
Software &
Hardware Product
Development

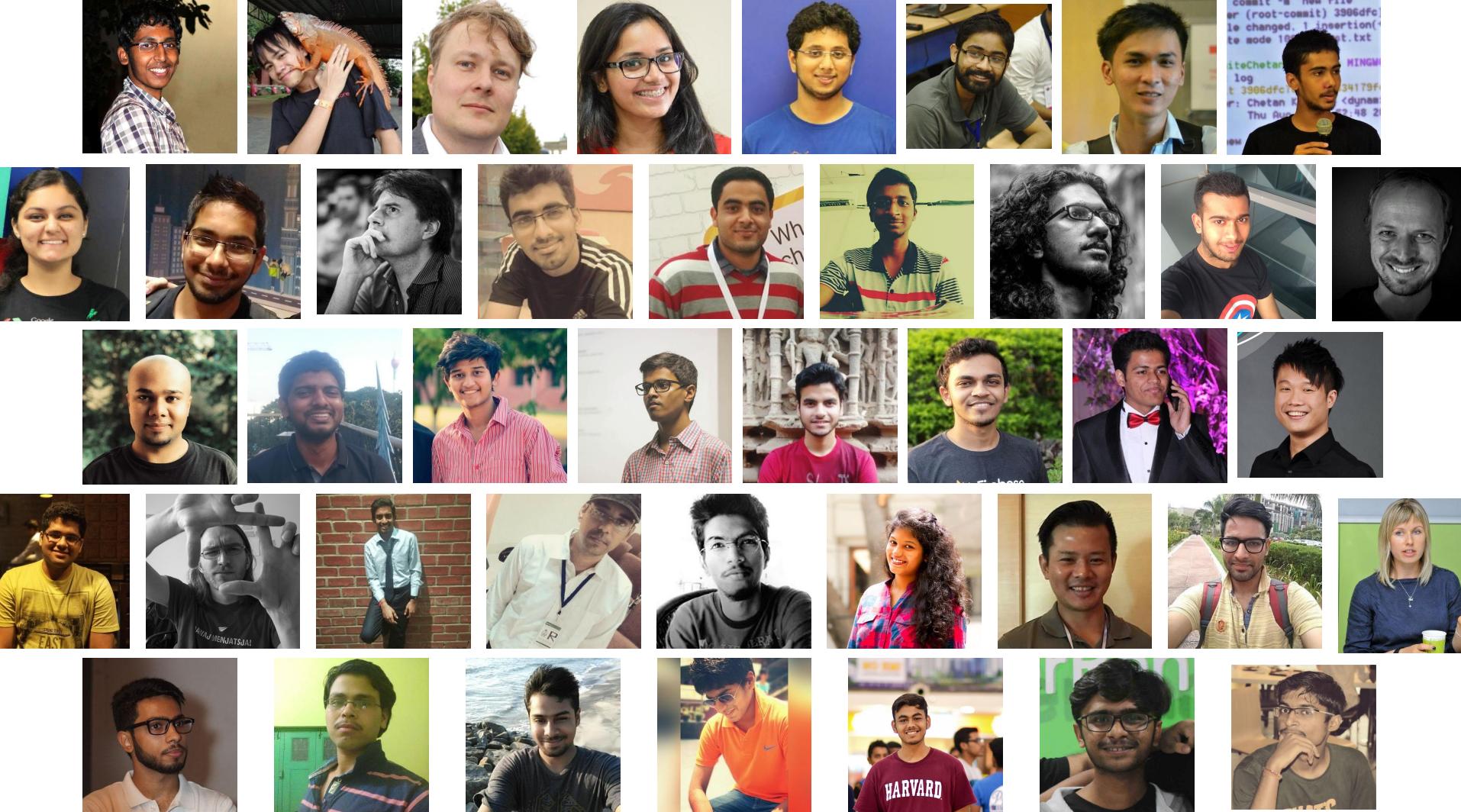
events.fossasia.org

Open Source
Events

codeheat.org

Open Education,
Academies and
Coding Programs

Income through SaaS + Hardware Sales + Events + Consulting



- Merged Pull Request on average every 15 minutes
- 35,000+ developers on mailing lists + social media
- 4000 developers registered on our GitHub orgs
- Training 2000+ developers through coding programs annually
- Dozens of face to face meetings at developer events, hackathons and workshops throughout Asia
- 100+ authors of tech blog articles



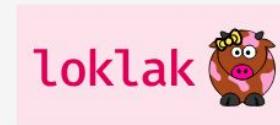
FOSSASIA
Open Technologies developed in Asia and Around the Globe

Singapore <https://fossasia.org> fossasia@googlegroups.com

Repositories 227 **Packages** **People 3.9k** **Teams 85**



Proudly developed at FOSSASIA



eventyay

SUPER

badgeyay

Scrum
Helper

neurolab



query-server



Labyrint

2009

Hong Phuc and Mario Behling found
FOSSASIA with the Goal to Connect
Progressive Community in Asia with Global
FOSS Developers



- Hosting GNOME.Asia in Vietnam
- Starting development of Linux and web tools

2009

2010

Kickstarting Projects, Mini DebConf and The
FOSSASIA Summit



Lessons: How to Grow Your Community

- Understand your community landscape
- Promote contributions apart from code
- Open source beyond software: designers, writers, promoters, organizers, fundraisers, mentors etc.
- Low entry barrier, friendly environment
- People like to travel and meet face to face

2011

Open Design Weeks Asia, More Events,
Attracting More Developers

Events are always fun



- From developers to designers - Connecting with the Libre Graphics community through Open Design Weeks
- Introducing FOSS tools at designer & art schools

2011



FOSSASIA Summit 2011



Lessons: What is Important to Attract Developers

Devs Want to:

- Be part of a community
- Do exciting projects
- Work with a positive brand/org (do cool things, do good)
- Get opportunities (recognition, money, travel, jobs)
- Work with processes that they like and are accustomed to
(The FOSS/Open Source Way/Git/Issue Trackers)

2012

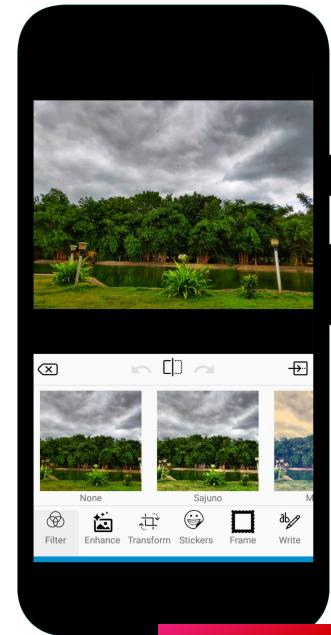
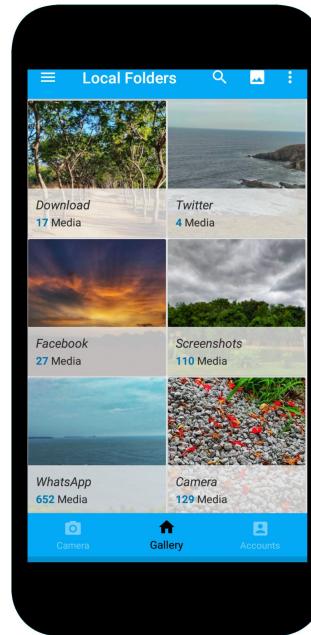
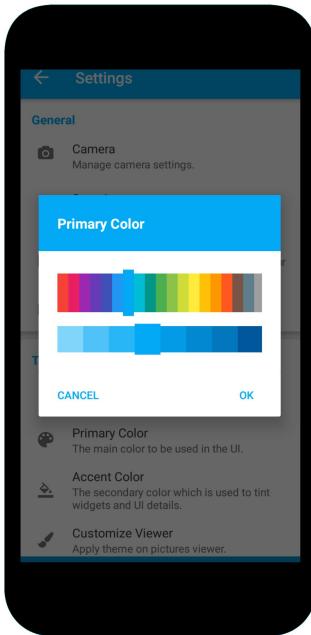
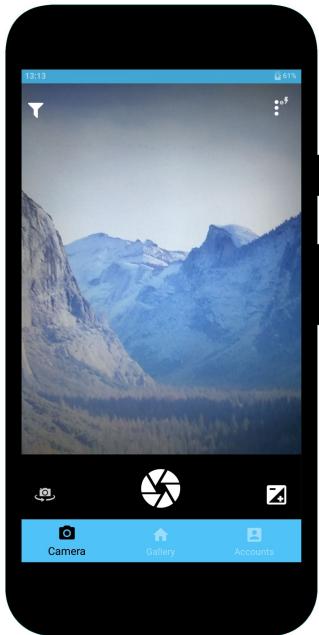
More Apps and
Our Second Year in GSoC



GET IT ON
Google Play



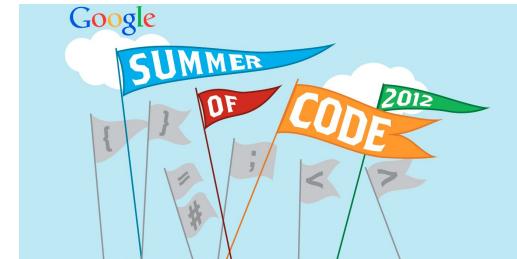
Photos, Images, Pictures - Phimp.me



2012

Lessons: Coding Programs

- Visibility attracts new developers and code contributions
- Opportunity to connect with projects from around the world
- Need clear guidelines to bring in Asian contributors into the FOSS ecosystem (culture barrier)
- Students are less committed than mentors
- Program ends, contribution ends



2012

2013

Fostering Open Source in Education and
Moving to Hosted Infrastructure

Lessons: Infrastructure

- Setting up infrastructure is not as hard and resource intensive as maintaining it
- We want to focus on development, events and sharing not on running infrastructure
- It is a compromise as not everything is Open Tech/FOSS (e.g. GitHub)

Open Tech Workshops in Schools across Vietnam



2013

- Cooperating with development organizations and companies on educational programs
- Discovering a new pool of young talents - future contributors
 - Computer literacy among young students
 - English ability

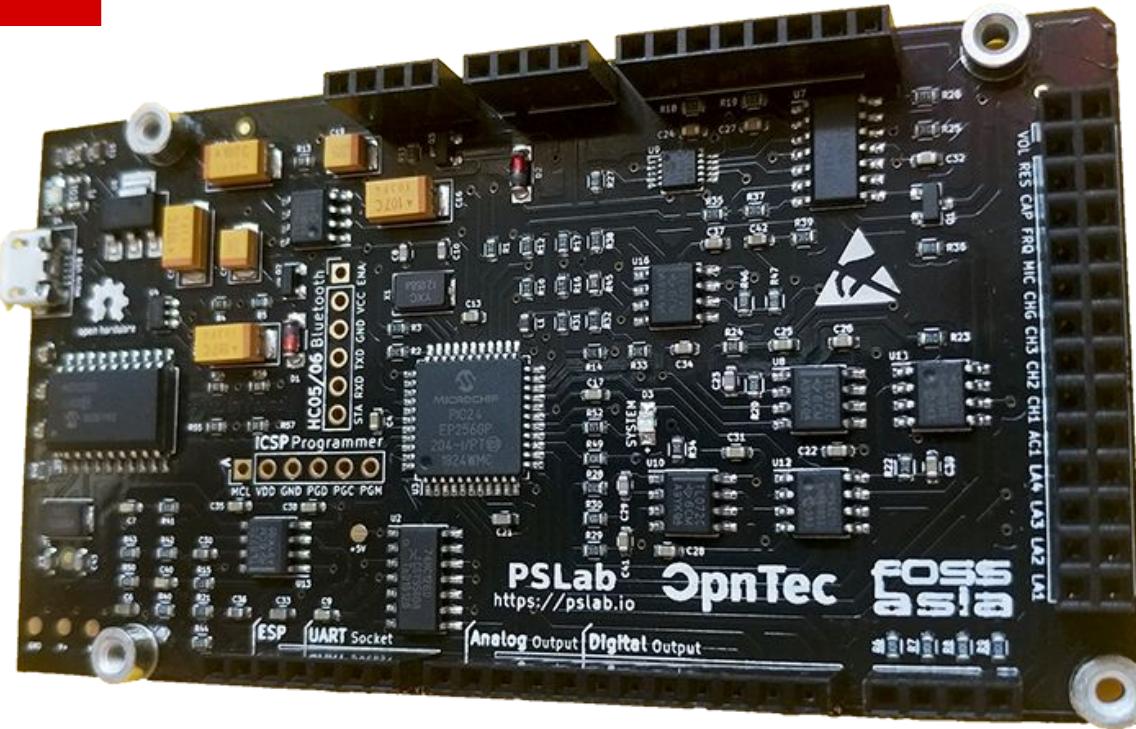
2014

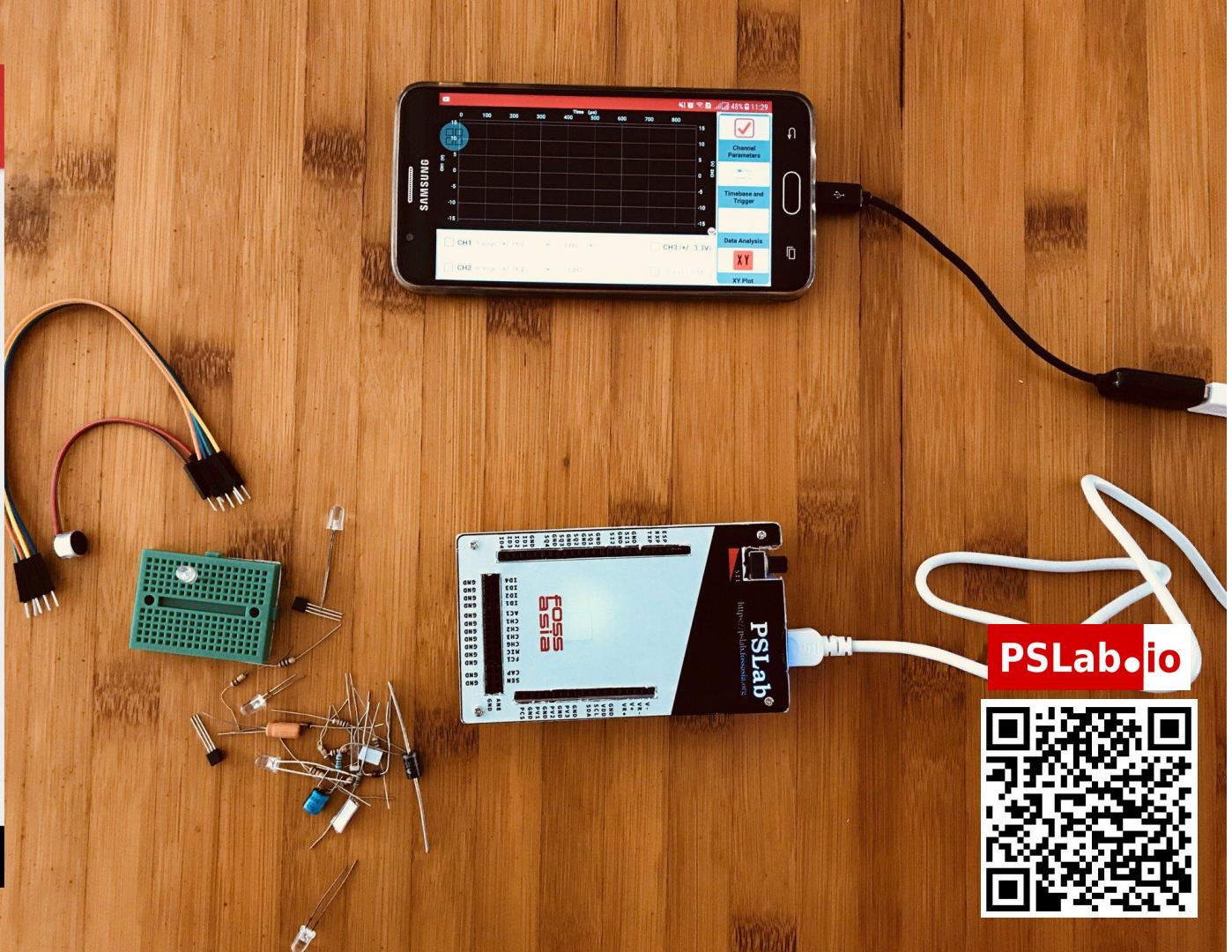
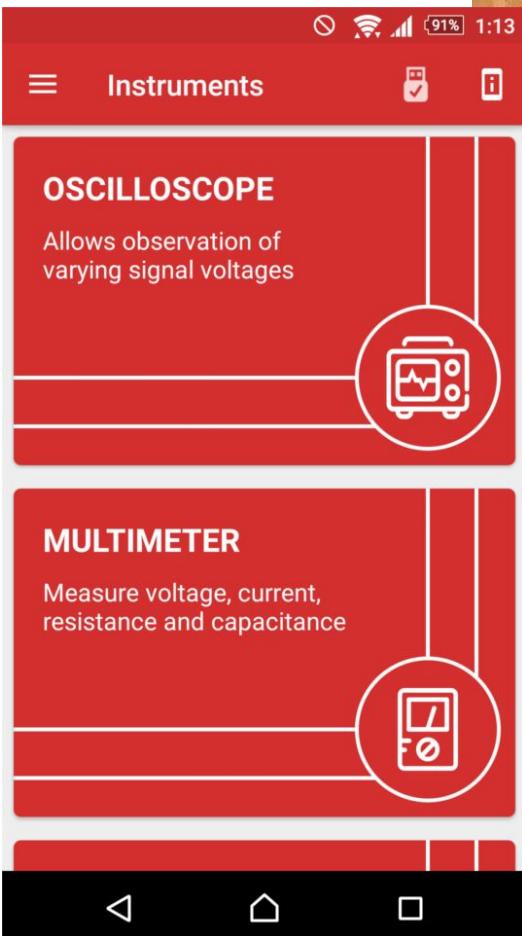
FOSSASIA Summit in Cambodia and Start of
First Open Hardware Project



FOSSASIA Summit Phnom Penh 2014

PSLab.io





What can it do

It can function as a..



Oscilloscope



Multimeter



Logic Analyzer



Wave Generator



Power Source



Accelerometer



Barometer



Compass



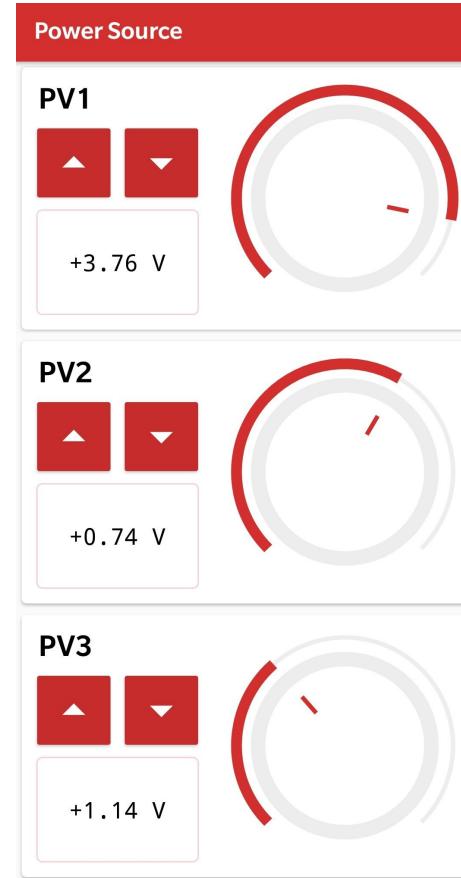
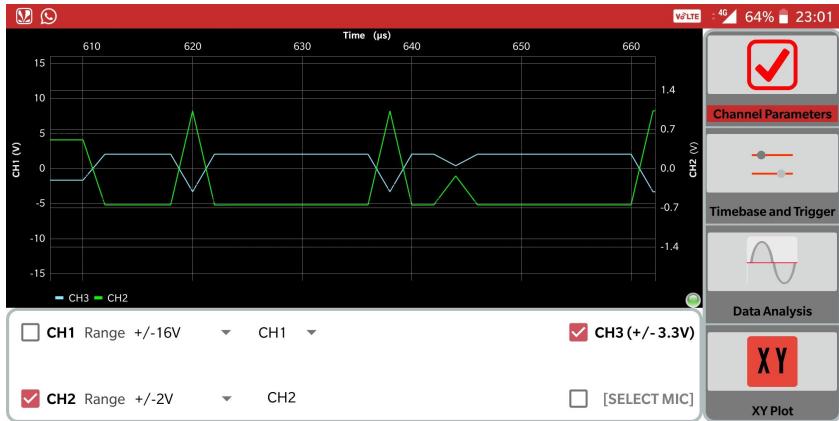
Sensors



Luxmeter

PSLab.io

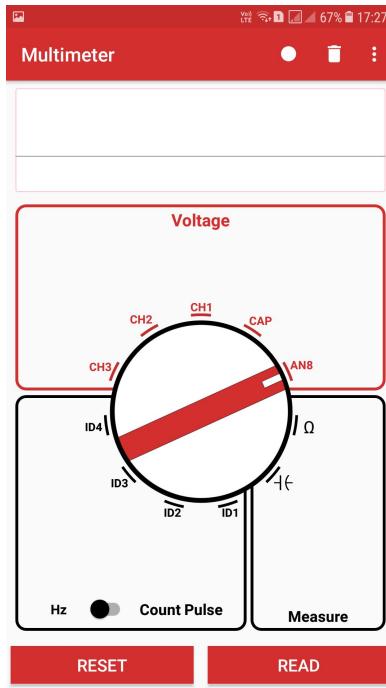




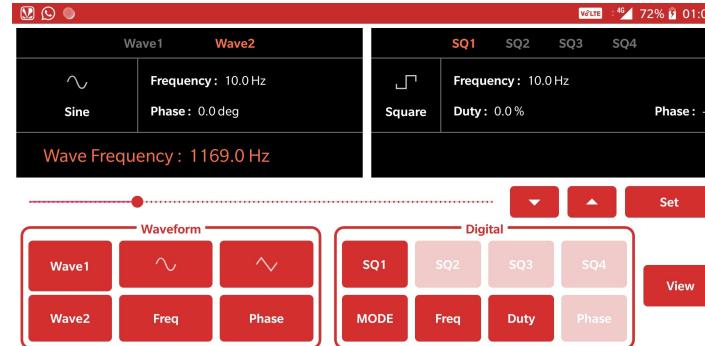
Power Source

PSLab.io

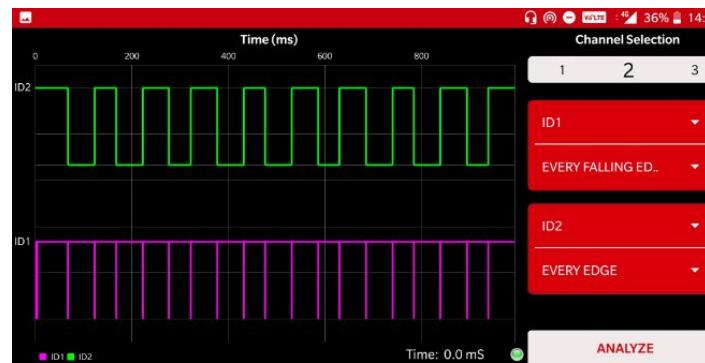




Multimeter



Wave Generator

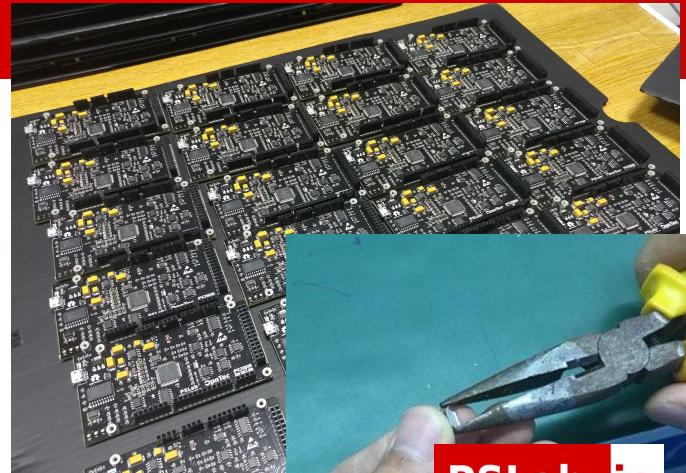
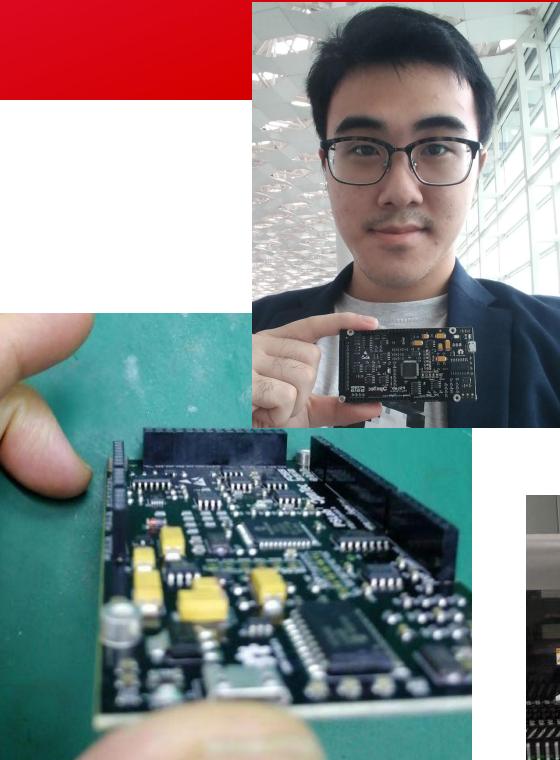


Logic Analyzer

PSLab.io



Producing Batches in Shenzhen and Berlin



PSLab.io



Lessons: Hardware Production

- Longer development cycles compared to software
- High investment, high risk
- Self-funded model
- Bill of materials
- Chinese speaking staff
- 'Remanufactured' offer
- Faulty parts
- Manufacturer's availability schedule



2015

FOSSASIA Summit in Singapore and Starting
Development of Event Management Tools

FOSSASIA Summit in Singapore



OpenTechSummit Europe - Berlin





The simplest way to create
events.

CREATE EVENT



eventyay.com

Open Source Event Management System

Open Event System: Goals



The FOSSASIA Summit 2019 is an exciting Open Technology event for developers, students, and start ups using open source to build up their businesses. It is a unique opportunity to share the latest innovations in open source technologies and meet contributors and potential partners. It will take place once again in Singapore from March 14 - 17, 2019.

Featured Speakers Since the first FOSSASIA meetup in 2009 in Ho Chi Minh City, FOSSASIA has taken the lead to organize Free and Open Source Software conferences in Asia. Past FOSSASIA events have attracted thousands of participants, speakers from 41 countries, and hundreds of volunteers. The FOSSASIA Summit has an over the average participation of female technologists.

Speakers

Call for speakers

Organizer

Getting Here

Ticket Information

TICKET TYPE	SALES ENDS	PRICE	QUANTITY	SUBTOTAL
Community Standard Full Event Pass for FOSSASIA Summit. Access to All Sessions. (Pre-registration required for some workshops). First 500 registration get a free Tshirt.	Sun, March 17	\$\\$ 99.00	0	\$\\$ 0.00
Hall Pass and Opening Keynotes Access to Exhibition throughout the Event and Access to Opening and Closing. - This Pass will not Give Access to the Keynotes and Main Sessions.	Sun, March 17	\$\\$ 15.00	0	\$\\$ 0.00

External Event URL
 Twitter
 YouTube
 LinkedIn
 Github
 Facebook
 Flickr
 Google+
 Blog
 Instagram

Tweets by @fossasia



- Ticketing: similar to Eventbrite
- CfS: Easy process to register speakers
- Scheduling: Drag and Drop
- Exporting: Ability to move events
- Website: Automatic site generator
- Android: Automatic Android generator
- Additional options: Free event licenses, CoC



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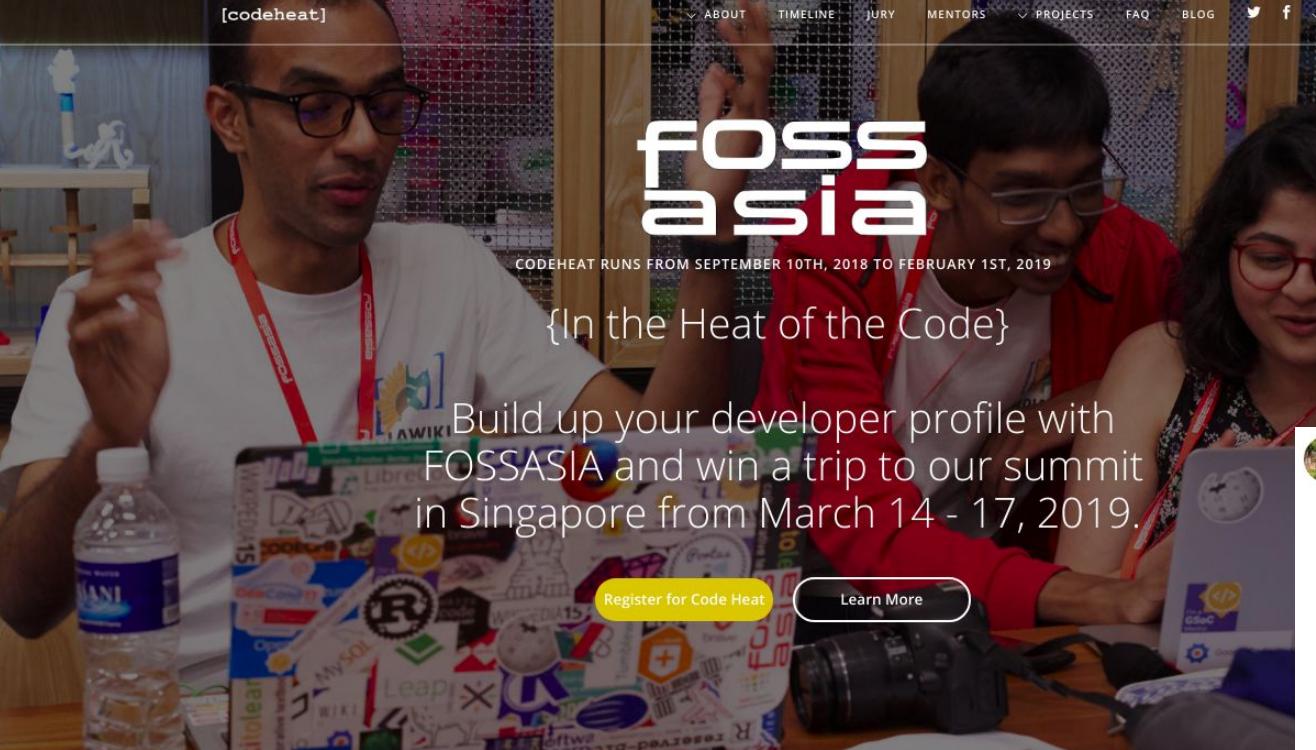
Thu... ▾	x	Thursday, 18th May	Amphitheatre	Office Hours Table 11 & 12	Office Hours Table 13 & 14	Office Hours Table 17 & 18	Office Hours Table 19 & 20	SandboxDome C	SandboxDome E	SandboxDome F	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	08:30	Building apps for the Google Assistant	Office Hours with the Android Studio team	Office Hours: Firebase App Quality Office Hours	Office hours with Games Developer Advocates	Office hours: Design guidance on enabling your app for Android	App Reviews: App Consultations	App Reviews: Design reviews	Sandbox Demo: Daydream and Tango	Polymer: Billions Served; Lessons Learned	Architecture Components - Solving the Lifecycle Problem				AMP Ads: Better Advertising on a Faster Web	The future of web payments	Shipping Santa Tracker: Carefully roll out a feature to a
2	08:45																
3	09:00																
	09:15																
	09:30	Office Hours with the Android Exoplayer team	Office Hours: Android battery performance office hours	Office Hours with the Dart and AngularDart teams	Office Hours: Payments - Meet the team who are												
	09:45																
	10:00																
	10:15																
	10:30	Zero to App: Develop with Firebase	Office Hours with the Android Studio Build System team	Office Hours: Firebase Grow Office Hours	Office Hours: Machine Learning Office Hours with	Office Hours with the Daydream and Tango Developer teams	App Reviews: App Consultations	App Reviews: Design reviews	Sandbox Demo: Daydream and Tango	Building rich cross-platform conversational UX				Daydream in the classroom: Immersive learning		Effective TensorFlow for Non-Experts	Fabric + Firebase: Building Momentum at Google
	10:45																



eventyay.com

2016

Launching CodeHeat Online Coding Contest
and Science Hack Days in Asia



FOSS asia

CODEHEAT RUNS FROM SEPTEMBER 10TH, 2018 TO FEBRUARY 1ST, 2019

{In the Heat of the Code}

Build up your developer profile with
FOSSASIA and win a trip to our summit
in Singapore from March 14 - 17, 2019.

[Register for Code Heat](#)

[Learn More](#)

650+ participants

650 registered in the Codeheat contest
2017/18 and learnt how to participate in
the FOSSASIA developer community.

2000+ merged pull requests

More than 2000 pull requests were merged during the contest.
Participants also submitted scrum reports, wrote blog posts and
created entirely new projects in the FOSSASIA community.

37 mentors

Mentors are developers, engineers, university
students, professors, and generally contributors who
love to share and be a part of our open source
community. They help creating better software for a
better and just world.



[Apoorv Taneja] @apoorv_taneja · Jun 3

Thank you @fossasia for giving me a platform to contribute to Open Source.
#OpenSource #reactjs

[codeheat]

FOSSASIA
presents this

Certificate

To

Apoorv Taneja

For your participation and contribution to
FOSSASIA CODEHEAT PROGRAM
September 10, 2018 - February 1, 2019

Mario Behling
Co-Founder, FOSSASIA



Heng Phuc Dang
Founder, FOSSASIA

2016

India: Codeheat Coding Contest Outreach Events



2016

Lessons: Developer Retention & Scale

- Be part of an International developer community
- Clear expectations
- FOSSASIA contribution guidelines
- Minimum 2 maintainers, peer reviewers
- Delegate tasks, assign project leads
- Promote mentor roles and support long-term devs



Mario Behling @mariobehling · May 8
#PythonGirls meetup #Shenzhen! Great turnout for @marcoagutierrez's @fossasia #OpenSource #openhardware @pslabio #Robotics workshop at Troublemaker. Let's make all #makers free and open! @hpding @optec. Thanks for hosting + organising @kele_006! #FOSSASIAAcademy

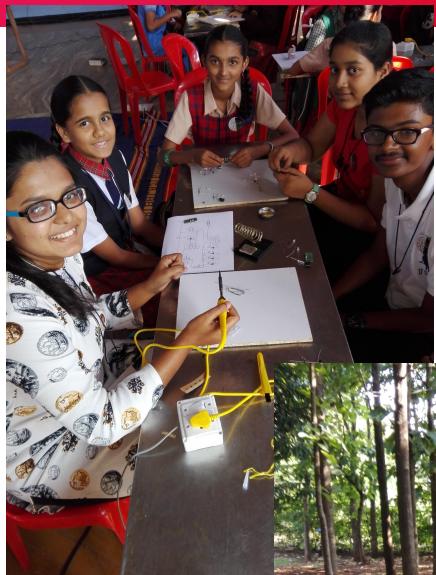


Rohit Potter @rpotter121998 · Jul 9
Thanks, FOSSASIA for lovely goodies.
Thanks, @fossasia @mariobehling @hpding.
#fossasia #developers



2016

Science Hack Workshop, Belgaum India



2016

Science Hack Day Singapore: Do-It-Yourself Workshops with Open Hardware Laser Cutters



2016

2017

Development of FOSSASIA Best Practices

Scaling up with Best Practices

- Match one issue with one pull request (PR)
- Break a big issue into multiple small issues
- Provide test systems and screenshots
- Only change what you state in the PR
- Help each other, review each others PRs
- Test first before making a PR
- Document while coding
- Earn write access
- Avoid private chat and collaborate with community

 fossasia / susi_server

 Unwatch ▾

45

 Unstar

1,511

 Fork

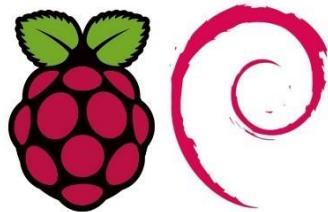
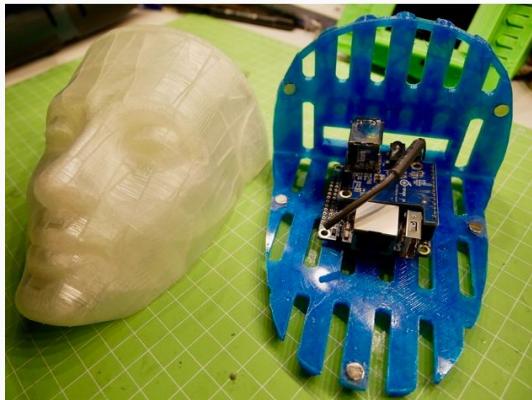
857

SUSI.AI Open Source Smart Speaker



VOICE: Star Trek IV 1986 - talk to a computer, it will solve your problem

Smart Speaker



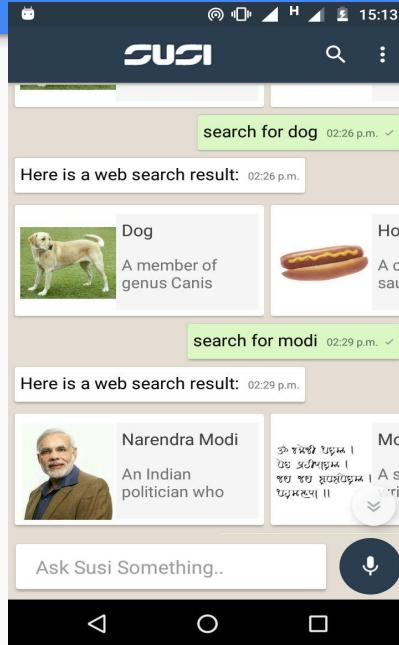
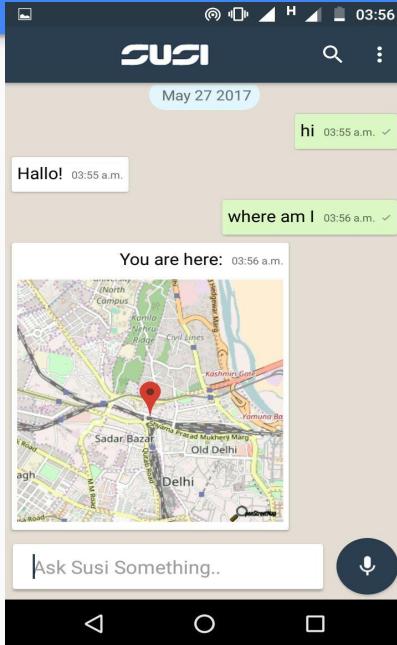
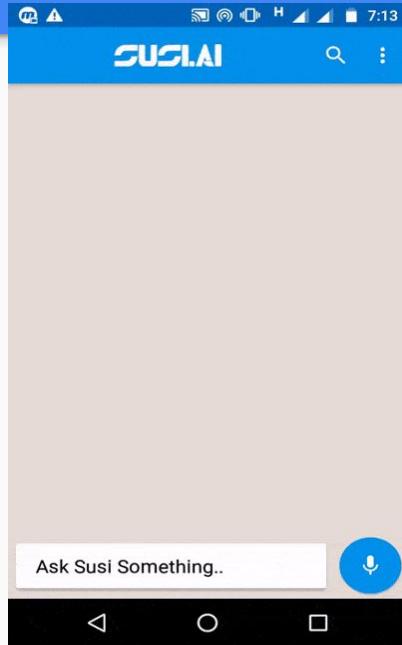
Raspbian



<https://susi.ai>



SUSI.AI Android and iOS



The screenshot shows the 'SUSI.AI Skills' section of the app. It lists several skills:

- Problem Solving**: Includes icons for addition (+), subtraction (-), multiplication (×), division (÷), and basic algebra equations.
- Evaluate Statements**: Described as allowing users to evaluate/compute basic algebra.
- Password Generation**: Described as getting help from S to generate a new password.
- Knowledge**: Includes a skill for Narendra Modi (An Indian politician) and a skill for the capital of Bangladesh.
- Capital**: A skill to tell users about the capital of any country.
- Language Translation**: A skill to translate text into other languages.
- Business and Finance**: A skill related to business and finance.



SUSI.AI is capable of chat and voice interaction and by using APIs to perform actions such as music playback, making to-do lists, setting alarms, streaming podcasts, playing audiobooks, and providing weather, traffic, and other real time information.

SUSI.AI CMS

https://skills.susi.ai

SUSI.AI

+ CREATE

New Arrivals

- Last 7 Days
- Last 30 Days
- Last 90 Days

SUSI Skills

- All
- Business and Finance
- Communication
- Connected Car
- Food and Drink
- Games, Trivia and Accessories
- Health and Fitness
- Knowledge
- Lifestyle
- Movies and TV
- Music and Audio
- News
- Novelty and Humour
- Problem Solving
- Productivity
- Shopping
- Social
- Sports
- Travel and Transportation
- Utilities
- Weather

Search

Staff Picks



EnglishAIMLL "Anagram for best"

★★★★★ 3



Anagrams "Suggest an anime"

★★★★★ 6



Anime Suggestions "search wikipedia for artificial intelligence"

★★★★★ 7



Wikipedia "search wikipedia for artificial intelligence"

★★★★★ 2

"SUSI, what are your highest rated skills?"



how to cook biryani

Cooking Guide

★★★★★ 11



fahrenheit to celsius 212

Weather Information

★★★★★ 13



word starting with m and ending with v

Playing With Words

★★★★★ 16



tweets about Donald Trump

Tweets

★★★★★ 18



Joke

★★★★★ 1

"SUSI, what are your most used skills?"



fahrenheit to celsius 212



Quote by Donald Trump



I do agree



Do you have a name



Wiki-like Content Management System

Create skills and private bots!

Simple and Easy to Learn Skill Markup Language - "Language of Thought" (LoT)

The screenshot shows the SUSI AI web interface for creating a skill. At the top, there's a search bar with 'Category: Knowledge' and 'Language: English'. Below it, a text input field contains the word 'remember'. To the right of the input field are two buttons: a blue folder icon labeled 'CHOOSE AN IMAGE' and a blue 'CREATE' button. On the right side of the screen, the generated LoT code for the skill is displayed:

```
1 ::name Remember
2 ::author Manveer Singh
3 ::author_url https://github.com/Manveer695
4 ::description A skill to remember something.
5 ::dynamic_content Yes
6 ::developer_privacy_policy
7 ::image images/remember.png
8 ::terms_of_use
9
10 remember that my * are * I remember that my * is * I remember that * is * I
remember that * are * I remember my * is * I remember * is * I remember *
are * I remember my * are * I please remember that my * are * I please
remember that my * is * I please remember that * is * I please remember
that * are * I please remember my * is * I please remember * is * I please
remember * are * I please remember my * are * I please help me remember
that my * are * I please help me remember that my * is * I please help me
remember that * is * I please help me remember that * are * I please help me
remember my * is * I please help me remember * is * I please help me
remember * are * I please help me remember my * are * I help me remember
that my * are * I help me remember that my * is * I help me remember that
* is * I help me remember that * are * I help me remember my * is * I help
me remember my * are *
```

"SUSI, what are your highest rated skills?"

A grid of four cards representing skills:

- Cooking Guide**: Icon of a chef's hat, description "how to cook biryani", rating 5 stars, 11 reviews.
- Weather Information**: Icon of a sun and cloud, description "fahrenheit to celsius 212", rating 5 stars, 13 reviews.
- Playing With Words**: Icon of a brain, description "word starting with m and ending with v", rating 5 stars, 16 reviews.
- Tweets**: Icon of a Twitter bird, description "tweets about Donald Trump", rating 5 stars, 18 reviews.

Buttons for **SAVE** and **CANCEL** are visible on the right.

"SUSI, what are your most used skills?"

A grid of four cards representing skills:

- Weather Information**: Icon of a sun and cloud, description "fahrenheit to celsius 212", rating 5 stars, 13 reviews.
- Trump Quote**: Icon of a person, description "Quote by Donald Trump", rating 5 stars, 7 reviews.
- Positive Expression**: Icon of a smiling face, description "I do agree", rating 5 stars, 1 review.
- About SUSI**: Icon of the SUSI logo, description "Do you have a name", rating 5 stars, 0 reviews.

Buttons for **SAVE** and **CANCEL** are visible on the right.

<https://susi.ai>

2018

Connecting more Closely with Our
Community in India, China and Around the
World

Sep 30 - Oct 3, 2018 Jugaad Fest
Hyderabad, India



Jugaad Fest India



2018

FOSSASIA Hackathons with UNESCO in Vietnam and Singapore



2018

Nov 30 - Dec 2, 2018 Open Tech Summit Shenzhen



Dec 27 - 30, 2018 Chaos Computer Congress,
Leipzig, Germany



2019

10th Anniversary and a New
Beginning



2019

VoiceRepublic.com

Releasing Voice Republic as Open Source after acquiring it together with OpnTec Germany. Co-developing it under FOSSASIA umbrella.



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PROFESSIONAL LIVE AUDIO STREAMING AND ARCHIVING OF EVENTS



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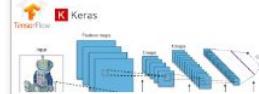
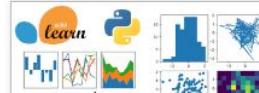
Listen to exclusive lectures and discussions with thought leaders. [Learn more »](#)

[LISTEN NOW](#)

2019

FOSSASIA Academy

Providing Singapore Government Certified Courses

 <p>FOSSASIA AD101 Augmented Reality Applications (Android)</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA AI103 Neural Networks I: Learn to Build Your Models</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA AI201 Neural Networks II: Image Object Recognition with CNNs</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA DS101 Python II: Your First Videogame</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA LX101 GNU/Linux: Hack the System!</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA RB101 Robot Mechatronics: Build your Robot with PSLab</p> <p>Starts: Coming Soon!</p>
 <p>FOSSASIA DS101 Python I: Your First Graphical Application</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA DS102 Data Science I: Understand Your Data</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA DS201 Data Science II: Learn and Predict the Future</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA HW101 Hardware: Experiment with PSLab</p> <p>Starts: Coming Soon!</p>	 <p>FOSSASIA RB102 Robot Navigation: Frameworks and Simulators</p> <p>Starts: Coming Soon!</p>	

2019

FOSSASIA Academy: Self-guided Learning of Open Technologies and Code in Asia



2019

2020

The year of challenges

- OpenTechSummit Bangkok and Yangon
- Online/Offline FOSSASIA Summit Singapore
- Explore hardware local production
- Codethecurve hackathon with UNESCO, IBM, SAP
- Maintain a healthy and connected community
- Focus on documentation
- Next version of EventYay, PSLAB and SUSI.AI

Summary: Building Bridges Between Open Source Communities

- ✓ Developing best practices and a friendly and open multilingual, multi-ethnic community culture
- ✓ Constantly attracting new talents through coding programs and events
- ✓ Promoting mentor roles, providing resources + supporting established developers (swag, travel, conferences, hiring)
- ✓ Growing different income streams to pay for all that
- ✓ Running a lean organization and infrastructure with a small awesome team
- ✓ Partnering with enterprises and other FOSS projects

Collaborate with us!

- Eventyay.com ~~Eventbrite~~
- Support Pocket Science Lab campaign
- Co-organize coding programs, contests, hackathons, events
- Check out our projects on GitHub
- Partner with FOSSASIA Academy

@fossasia

@hp dang

Hong Phuc Dang, hp@fossasia.org