

Akshai M

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EDUCATION

COCHIN UNIVERSITY (CUSAT)

2015 | B.TECH IN ELECTRONICS AND
 COMM. ENGG

College of Engineering, Kalloppara
 First Class

HIGHER SECONDARY

2011 | Dr. ZHM School, Chry

AISSCE - 77.8/100

AISSE - 84.6/100

LINKS

Gitlab :// akshaim

Github:// akshaim

LinkedIn:// akshaim

Twitter:// @m_akshai

Quora:// Akshai-M

PROJECTWORK

UNDERGRADUATE

Embedded ARM, AVR

RF Communication

Hardware Prototyping

Open Source toolchains

Linux SBC's

SKILLS

PROGRAMMING

Embedded C • Shell • Python

Micro-Python • AVR Assembly • C • \LaTeX

Familiar:

LUA • C++ • Arduino IDE

Tools:

Git, KiCAD, Inkscape, Antimony

Ngspice

MACHINES

3D Printer – Reprap Prusa i3, Ultimaker-3,

Stratasys Dimension 1200es • Shopbot

CNC Router • Rolland Modella • Rolland

GX – 24 • Trotec Speedy 100 Laser

Engraver

ENTREPRENEURSHIP

Founder | **MicroHOPE Foundation**

A not for profit organization promoting the
 use of Open Source Hardware for Learning
 Science.

INTERESTS

Teaching, Electronics, DIY hardware

hacking Speed cubing, Percussion

Instruments - Tabla, Mridangam, Blogging,

Science Fiction.

EXPERIENCE

ICFOSS | RESEARCH ASSISTANT (IoT)

Sep 2017 - Current | Trivandrum, India

- LoRa In a Box Project for Disaster Management/ LSGD Applications.
- ULP LoRa Hardware Development with support for Battery and Battery + Energy Harvester modes.

IIT BOMBAY | RESEARCH ASSISTANT (FOSSEE PROJECT)

Oct 2016 – Sep 2017 | Mumbai, India

- OpenPLC Project, revision of hardware to a Modular Platform based on IEC 61499 enabling distributed control/system automation.
- Adopted FORTE (4DIAC Runtime) of Fortiss GmbH, Munich.
- Eclipse SCADA (Process visualization) and FBRT (HMI) implementation.

ICFOSS | TECHNICAL COORDINATOR (OPEN SOURCE HARDWARE)

Jun 2016 – Sep 2016 | Trivandrum India

- ExpEYES Community Development and Hardware Revision.
- LeSEG Project - Sustainable Labs based on Single Board Computer for Colleges.
- 4DIAC Community Development Project.

KERALA STARTUP MISSION | TECHNOLOGY INNOVATION FELLOW

Jul 2015 – Jun 2016 | Trivandrum India

- Fellow at FabLab Kerala, initiative by CBA, MIT Boston and GoK.
- Engineered IoT Labs and COWMesh - Community Owned Wireless Mesh - Aruvikkara.

ACTIVITIES

Workshops/ Talks

- "LoRa Demystified Workshop" GOSH, Shenzhen, China : Oct 12, 2018.
- "ULP LoRa Workshop" Open Hardware Summit, MIT Boston : Sept 27, 2018.
- "Industrial Automation and Control using FLOSS and Open Source Hardware" RMLL- LSM, Saint Etienne, France : July 01-07, 2017.
- "OSH enabled Physics" **Gathering for Open Science Hardware** Santiago, Chile : March 22-25, 2017.
- "OSH enabled IoT for the year 2016" **FYPM 2016** : Jan 13 2017.
- Workshop on "MicroPython for MicroControllers" **Scipy India 2016**: Dec 10, 2016.
- Workshop on "ExpEYES" **Gnome Asia Summit** Indonesia : May 07, 2015.
- Workshop on "MicroHOPE" RMLL Montpellier France : July 05-11 2014.

Publications

- Programmable Logic Controller: Open Source Hardware and Software for Massive Training : IECON18, 2018 IEEE
- Book on Computer interfaced experiments using ExpEYES, Malayalam - ICFOSS.
- SVASTHA: An effective solid waste management system for Thiruvalla Municipality in Android OS : GHTC-South Asia Satellite, 2013 IEEE.

Volunteering

- Chairman | IEEE SB CE Kalloppara: 2014-15.
- EC Coordinator | IEEE Travancore HUB (LINK): 2013-14.
- Coordinator | NASA Space Apps Challenge Kochi : 2014.

Awards

- 2018 **GOSH Fellow**.
- 2018 **Ada Lovelace Fellowship**.
- 2017 **GOSH Fellow**.
- 2014 Certificate of Appreciation | IEEE Kerala Section, NASA Space Apps.
- 2013 Third Prize | IEEE R10 (Asia-Pacific) Student Paper Contest 2013.
- 2013 Winner | IEEE SIGHT R10 Humanitarian Page Contest.