

Akshai M

<http://akshaim.in>
mail@akshaim.in | +91 8281 032 880

EDUCATION

COCHIN UNIVERSITY (CUSAT)
2015|B.TECH IN ELECTRONICS AND
COMMN. ENGG

College of Engineering, Kallooppa
 First Class

HIGHER SECONDARY

2011 | Dr. ZHM School, Chry
 AISSCE - 77.8/100
 AISSE- 84.6/100

LINKS

Gitlab :// [akshaim](#), Github:// [akshaim](#)
 LinkedIn:// [akshaim](#), Quora:// [Akshai-M](#)
 Twitter:// [@m_akshai](#)

PROJECTWORK

UNDERGRADUATE

Embedded ARM, AVR, RF Comms
 Hardware Prototyping, Linux SBC's

SKILLS

PROGRAMMING

Embedded C • Shell • Python
 Micro-Python • AVR Assembly • C • \LaTeX
 Familiar:

LUA • C++ • Arduino IDE

Tools:

Git, KiCAD, Inkscape, Ngspice

FAB 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.

REFERENCES

Prof. Alois Zoitl | TU Munich, JKU Austria
 Dr. Jayasankar Prasad C | ICFOSS, KSUM
 Prof. Kannan M Moudgalya | IIT Bombay
 References shall be made available upon
 request

EXPERIENCE - 4 YEARS

ICFOSS | RESEARCH ASSISTANT (IoT)

Sep 2017 - Current | Trivandrum, India

- Research Officer - RISC V CoE
- LoRa in a Box and ULPLoRa Hardware Development with support for Battery and Battery + Energy Harvester systems.

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

- "LoRaWAN in a Box Workshop" LoRa Alliance, Berlin : June 11-13, 2019.
- "LoRa Demystified Workshop" GOSH, Shenzhen, China : Oct 12, 2018.
- "ULPLoRa 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 Kallooppa: 2014-15.
- EC Coordinator | IEEE Travancore HUB (LINK): 2013-14.

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.