Akshai M

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Work experience

FOSSEE, IIT Bombay

October 2016 - Present

Research Assistant

• Developer - OpenPLC Project, Revision of Hardware to a Modular Platform.

ICFOSS, Govt of Kerala

June 2016 – September 2016

Technical Coordinator, Open Source Hardware

- Project Coordinator <u>ExpEYES Community Development and Hardware revision</u>.
- Project Coordinator LeSEG Project ,Sustainable Labs for Technical Institutions under APJ Abdul Kalam Technological University , Kerala
- Project Coordinator <u>4DIAC Community Development Programme under fortiss</u> · An-Institut Technische Universität München.

Kerala Start Up Mission, Govt of Kerala

July 2015 – June 2016

Technology Innovation Fellow

- Fellow at <u>Fab Lab Kerala</u>, an initiative from Center for Bits and Atoms, MIT Boston and Govt. of Kerala.
- Development and deployment <u>IoT labs</u> and its curriculum for colleges via IEDC's.
- Development of school curriculum for <u>ExpEYES</u>, a portable science lab for schools and revision of ExpEYES hardware for large scale manufacturing.
- Project Engineer, COWMesh Community Owned Wireless Mesh, Aruvikkara.

ICFOSS, Govt of Kerala

May 2015 – July 2015

Intern, IoT Project Developer

- Mentored and delivered 11 projects in the field of Internet of Things during a period of 1 month.
- Developed IoT curriculum for Engineering College Students.
- Supported ExpEYES Training at IUAC , Nuclear Research Centre , New Delhi.

All India Radio, Govt of India

2 Weeks May 2013

Training

- Part of a team of 12 who got training at 200KW transmitting station at AIR Alleppey.
- One week schedule at AIR Transmitter center. Learned the basics of industrial radio design models, High power Vaccum Tube based amplifiers, power compilation techniques and Coaxial cable designs.

Social Entrepreneurship (Technical)

MicroHOPE Foundation

Founder Dec 2013 - Present

- Development of MicroHOPE Board, an AVR Controller based prototyping board.
- Delivered over 10 workshops on OSHW and MicroHOPE under support from ICFOSS.
- Mentored projects using MicroHOPE Hardware.

Events and Activities (Technical)

IEEE SB CE Kallooppara

Jan 2014 - Jan 2015

Chairman

- IEEE Member since December 2011
- Career development strategy for IEEE Student Members.
- Development of professional behavior among my colleagues and juniors thereby supporting the very reason and existence of the organization.

IEEE Travancore Hub

Jan 2013 - Jan 2014

EC Coordinator

- Opportunity to support 23 Engineering colleges in South Kerala via IEEE LINK.
- Conducted workshops and volunteer training programs.

IEEE GHTC YPP - 2

June 2013

Member

- Development of solution to issues addressing Rural District Health Office Data Connectivity and eHealth Record system.
- Team developed a detailed engineering design specification that outlines the scope of the project, the technical and social problems as we see it, and the proposed solution approach.

ICFOSS

Jan 2014 – April 2015

Student Ambassador

- Supported Activities of ICFOSS, an autonomous institution under the Government of Kerala, mandated with the objectives of co-coordinating FOSS initiatives within Kerala.
- Opportunity to work with the core team to improve free software and open hardware adoption in Kerala.
- A part of the team that conducted Swatantra 2014 International FOSS conference

Association RMLL Montpellier , France

July 2014

Fellow

 Public speaker and associate at 15th Libre Software Meet -Rencontres Mondiales du Logiciel Libre by Fédération Régionale des Utilisateurs du Libre - FRUL held at Montpellier , France.

NASA Space Apps Challenge - Kochi

Apr 2014

Coordinator

- The International Space Apps Challenge is an international mass collaboration focused on space exploration that takes place over 48-hours in cities around the world.
- Lead a team of 15 volunteers to conduct the event at Startup Village Kochi, Kerala.

Education

B.Tech Electronics and Communication

Sept 2011 — April 2015

Engg.

College of Engineering Kalloopppara, CUSAT Affiliation

• Completed in First Class with an aggregate of 68.65 %.

Higher Secondary

- Dr. Z.H.M Bharatiya Vidya ViharScored over 77% marks in AISSCE.
 - Scored over 84% marks in AISSE.

June 2009 — March 2011

Achievements

Certificate of Appreciation - IEEE Kerala Section (2014)

Certificate of Appreciation - NASA (2014)

IEEE R10 Student Paper Contest 2013 - Awarded with third prize for paper named

"Svastha – Effective Solid Waste Management in Tiruvalla Muncipality"

IEEE PES - KSEB Paper Presentation Competition 2nd Prize 2013 - Kerala State Electricity Board and IEEE

Power and Energy Society

IEEE SIGHT R10 Humanitarian Page Contest Winner 2013 - IEEE SIGHT

Publications

Book on Computer interfaced experiments using ExpEYES – Experiments for Young Engineers and Scientists (Regional Version in Malayalam)

AVR Assembly tools for concurrent programming in C – Open Hardware Track , <u>Gnome Asia Summit Indonesia 2015</u>

May 2015

MicroHOPE , DIY Hardware for real world solutions – <u>Libre Software Meet 2014</u> , <u>Montpellier France</u>. RMLL Archives.
July 2014

SVASTHA: An effective solid waste management system for Thiruvalla Municipality in Android OS - <u>Global Humanitarian Technology Conference: South Asia Satellite (GHTC-SAS)</u>, 2013 IEEE August 23, 2013

Technical Skills

Languages

Linux Shell Scripting, Python, LUA, Embedded C, R, HTML.

Tools

Git Version Control

CAD Tools

KiCAD

Kokopelli

Antimony

Inkscape

Machines

3D Printer – Ultimaker 2 and Stratasys Dimension 1200es , Shopbot CNC Router , Rolland Modella , Rolland GX - 24 Vinyl Cutter , Trotec Laser Engraver/ Cutter , ALC Sand Blaster

Interests

- Electronics, DIY hardware hacking.
- Speed cubing , Percussion Instruments Tabla

References

Dr. Jayasankar Prasad CEO , Kerala Startup Mission

Email: jayasankar.prasad@gmail.com

Dr. Ajith Kumar B P

Scientist SH , Inter University Accelerator Centre Email : ajith@iuac.res.in