

Vishnu Easwaran E

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EDUCATION

- **Sree Chitra Thirunal College of Engineering; University of Kerala** Kerala, India
Bachelor of Technology in Electronics and Communication Aug. 2010 – April 2014

EXPERIENCE

- **Free/Libre and Open Source Software for Education— FOSSEE, IIT Bombay** Mumbai, India
Research Associate July 2017 - Present
 - **OpenPLC**: Development of IEC61131-3 and IEC61499 standard PLCs for educational purposes.
 - * **Hardware/Electronics Design**: PCB design, layout, prototyping and testing. Designed power management, communication, ADC and interfacing elements.
 - * **Embedded Software/Firmware**: Developed Firmware for 8-bit controllers and application software and scripts for Linux running in single board computers.
 - * **System Design**: Logical design, Physical design, Architectural design, and analysis of PLC system complying with the IEC 61131-3 & 61499 standards.
 - **Documentation**: Managed the creation of tutorials for OpenPLC and its sister hardware projects, in the SpokenTutorial platform of Government of India.
 - **Teachers Training**: Lead a team of 6 in conducting technical workshops on behalf of FOSSEE, for faculty and students, in engineering and polytechnic colleges.
 - **Mentor**: Identification, selection and mentoring of FOSSEE summer fellows from all over India.
- **FabLab Kerala— KSUM, Govt. of Kerala.** Kerala, India
Technical Associate December 2016 - July 2017
 - **Technical Associate**: Technical associate to artists of Kochi Muziris Biennale on behalf of KSUM.
 - **Fab Academy Instructor**: Course instructor and evaluator at Trivandrum Fab Lab for the batch of 2017.
 - **Mini-FabLabs**: Setup mini-fablabs in association with Fab Foundation, across the state.
- **Kerala Startup Mission— KSUM, Govt. of Kerala.** Kerala, India
Technology Innovation Fellow June 2015 - June 2016
 - **Fab Lab**: Setup Fab Labs in Trivandrum and Kochi. Developed and mentored research projects at Fab Labs.
 - **Technical Consultant**: Rapid prototyping consultant at Fab Lab for start-ups, engineering colleges, NGOs etc.
 - **State Policy Agent**: Implementation and monitoring of entrepreneurship development programs of Kerala State government's startup policy.
- **Sahridhaya— NGO** Kerala, India
Trustee June 2012 - Present
 - **Head of R&D**: Developed various educational tools and programs for teaching STEM among school students. Organized and volunteered for numerous social activities in the state, latest during the devastating Kerala floods.

PROJECTS

- **PROTON**: An Arduino based development board with a battery of on-board sensors and actuators bundled with provisions for multiple communication technologies.
- **CoW-Net**: A research project that deployed an open-wireless network in a Panchayat connecting the local populace with modern tech-enabled services like instant messaging, geo-tagging, educational content portals etc.
- **S² - Smart Switch**: An IOT enabled power-switch which can be controlled over internet.
- **Hypothermia detector**: A functional prototype, with a system made of an Attiny 45 and an NTC thermostat.
- **Mind Controlled Wheelchair**: Proof-of-concept of an EEG controlled wheelchair for individuals with limited motor abilities.

CERTIFICATES AND AWARDS

- **Management Development Program**: IIM Kozhikode - 2016
- **Fab Academy Diploma in Digital Fabrication**: Fab Foundation - 2016
- **Manorama Yuva Master Mind**: Malayala Manorama - 2012

PUBLICATIONS

- **“Programmable Logic Controller: Open Source Hardware and Software for Massive Training” at IECON’18, Washington D.C, USA: 2018**

DESIGN AND ENGINEERING SKILLS

- **Languages**: Embedded C, Arduino, C++, Python **Technologies**: EDA, ARM, GIT, Linux, Digital Fabrication