

# Aswin Babu Karuvally

Karuvally House, West of Velinilam Temple, Muhamma P.O, Alappuzha, 688525  
aswinbabuk@gmail.com • +91 999 505 4663 • <http://karuvally.github.io>

INTRODUCTION	Developer, trainer and free software enthusiast	
EDUCATION	<b>College of Engineering Trivandrum</b> , Kerala, India <ul style="list-style-type: none"><li>Master of Computer Applications<ul style="list-style-type: none"><li>CGPA: 7.7 / 10</li></ul></li></ul>	Aug 2016 – Jun 2019
	<b>Naipunnya School of Management</b> , Kerala, India <ul style="list-style-type: none"><li>BSc. Computer Science<ul style="list-style-type: none"><li>CGPA: 7.9 / 10</li></ul></li></ul>	Jun 2013 – May 2016
LINKS	<ul style="list-style-type: none"><li><b>Github</b>: <a href="https://github.com/karuvally">https://github.com/karuvally</a></li><li><b>LinkedIn</b>: <a href="https://linkedin.com/in/karuvally">https://linkedin.com/in/karuvally</a></li><li><b>Blog</b>: <a href="https://karuvally.github.io">https://karuvally.github.io</a></li></ul>	
EXPERIENCE	<b>CAD Engineer, XILINX</b> , Hyderabad, India <ul style="list-style-type: none"><li>Developed tool to report Engineers not getting access to their license share<ul style="list-style-type: none"><li>Improved job runtime for engineers</li><li>Reduced turnaround time for Infra team</li></ul></li><li>Developed AutoKill system for non-compliant jobs in compute cluster<ul style="list-style-type: none"><li>Improved license availability for critical jobs</li></ul></li><li>Conducted company-wide training on ICM GDP Revision Control System<ul style="list-style-type: none"><li>Empowered users to fix basic issues themselves</li></ul></li></ul>	Jul 2019 – Sep 2021
	<b>CAD Engineer Intern, XILINX</b> , Hyderabad, India <ul style="list-style-type: none"><li>Enhanced Compute cluster status check tool<ul style="list-style-type: none"><li>Enabled better statistics for compute cluster</li><li>Allowed easier management, maintenance of cluster</li></ul></li></ul>	Feb 2019 – Jul 2019
	<b>Freelancing</b> , Kerala, India <ul style="list-style-type: none"><li>Worked as freelance developer, admin, manager</li><li>Worked with institutions to train students on GNU/Linux, Git, IoT and Python</li></ul>	Dec 2015 – Nov 2018
PROGRAMMING	<ul style="list-style-type: none"><li><b>Python</b><ul style="list-style-type: none"><li>Extensively used Python for network programming, system scripting, automation, web development, IoT, image processing, machine learning and web scraping</li></ul></li><li><b>Shell Scripting</b><ul style="list-style-type: none"><li>Developed tools to automate everyday problems such as script for automatically reconnecting dropped dialup connection. At XILINX, ported CShell scripts to Python</li></ul></li><li><b>PHP</b><ul style="list-style-type: none"><li>Developed a number of web applications that used PHP to generate dynamic content.</li></ul></li><li><b>HTML5 and CSS3</b><ul style="list-style-type: none"><li>Developed a number of web frontends for web applications and for static websites.</li></ul></li><li><b>SQL</b><ul style="list-style-type: none"><li>Used MariaDB as backend database for web apps and in house automation tools</li></ul></li></ul>	
TOOLS AND TECHNOLOGIES	<ul style="list-style-type: none"><li><b>GNU/Linux</b><ul style="list-style-type: none"><li>Using Linux as the primary Operating System since 2005.</li><li>Deployed and maintained Linux Systems including web, file and backup servers</li></ul></li></ul>	

- Trained students on Linux basics, shell and managing IoT devices running Linux
- **Version Control**
  - Experienced with Git and Gitflow, Perforce Helix Core, ICMange GDP
  - Served as resource person for Git workshops
- **Internet of Things**
  - Experienced with Raspberry Pi and Arduino
  - Used Raspberry Pi for several projects including surveillance
  - Trained students on IoT both inside and outside CET
- **Image Processing**
  - Implemented a number of projects in OpenCV including one to differentiate book copies
  - Trained students in Image Processing and OpenCV
- **Numpy and Pandas**
  - Used Numpy for variety of Image Processing and Machine Learning Projects
  - Used Pandas for dealing with really large datasets
- **scikit-learn**
  - Developed demand and car price prediction system
- **Web Scraping**
  - Experienced with Selenium, Scrapy and BeautifulSoup
  - Developed scraping script for Servntire using Selenium
- **MongoDB**
  - Developed an experimental web app with MongoDB backend for handling data from large number of distress calls during Kerala Floods - 2018
- **pdb**
  - Used pdb for extensively debugging Python applications
- **Django and Bottle**
  - Used Django and bottle for webapp development

## PUBLICATIONS

## CONFERENCES

- [1] Aswin Babu Karuvally, Basith Hameem, Ann Jerin Sundar and John Prakash Joseph “Enhancing Performance and Reliability of Network File System,” in *Proceedings of the International Conference for Control Communication and Computing 2018*, Trivandrum India, Jul 2018.

## PROJECTS

- **Deploy It** - simple to use deployer for Python apps 2019
- **NetDog** - dead simple configuration management 2018
- **Lightup** - replacement for Intel’s xbacklight utility 2017
- **Modem Reset** - Auto reset and reconnect dialup connection upon failure 2011

## INTERESTS

UNIX • Free Software • Network Programming • Vintage Computing • Virtualization

## AWARDS & ACHIEVEMENTS

- First Prize, Enigma - Linux Talent Hunt, Nakshatra 2018, NIT Calicut 2018
- First Prize, Enigma - Linux Talent Hunt, Nakshatra 2017, NIT Calicut 2017
- Best Paper Award for “Replacing GUI with Shell”, Daksha Yantra, IHRD Attingal 2017
- Best CS Student Award, Naipunnya School of Management 2016
- Best Performer Award, Naipunnya School of Management 2016

[Last updated on 2021-12-13 ]