# **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

#### **EDUCATION** College of Engineering Trivandrum, Kerala, India

Master of Computer Applications

Aug 2016 – Jun 2019

• CGPA: 7.7 / 10

• CGPA: 7.9 / 10

#### Naipunnya School of Management, Kerala, India

■ BSc. Computer Science

Jun 2013 - May 2016

LINKS

• Github: https://github.com/karuvally

• **Gitlab**: https://gitlab.com/karuvally

LinkedIn: https://linkedin.com/in/karuvally

#### **EXPERIENCE**

## Consultant, DAMAC Solutions, Trivandrum, Kerala, India

Aug 2018 – Nov 2018

Tasked with evaluating and deploying cloud backup solution

#### Developer, Project Lifeboat, Kerala, India

Aug 2018 - Sep 2018

- Developed scripts for removing duplicates from distress call data
- Helped in deploying and maintaining servers
- Coordinated the developement team

## Developer and Admin, KnowledgeBase @ CET, Trivandrum, Kerala, India

Jan 2018 - Nov 2018

- Deployed easy to use web file manager for storing academic resources
- Tasked with maintaining and administering the system

# Trainer, FestFlick, Trivandrum, Kerala, India

Sep 2017 – Nov 2018

Served as resouce person for IoT, Python and Linux, Git and Image Processing workshops

#### **Student Faculty, IoT Lab, CET**, Trivandrum, Kerala, India

Aug 2017 – Nov 2018

• Tasked with conducting workshops on Linux, Python and IoT devices such as Raspberry Pi

# Homepage maintainer, Free Software Users Group, Trivandrum, Kerala, India

Jul 2017 – Jan 2018

maintained http://tvm.fsug.in

#### Developer and Admin, Dextro Systems, Alleppey, Kerala, India

Dec 2015 – Jan 2017

- Developer web applications using Python and Bottle
- Deployed and managed projects on PaaS (OpenShift) instances

#### **PROGRAMMING**

# ■ Python 2 and 3

• Extensively used Python for network programming, system scripting, automation, web development, IoT, image processing, machine learning and web scraping

# Shell Scripting

• Used BASH as primary language before switching to Python. Developed tools to automate everyday problems such as script for automatically reconnecting dropped dialup connection

#### **■** C

• Used C to convert previously written scripts in Python to increase performance and decrease memory footprint

#### PHP

• Developed a number of web applications that used PHP to generate dynamic content.

#### HTML5 and CSS3

• Developed a number of web frontends for web applications and for static websites.

#### ■ LATEXand Beamer

Used LATEX as primary typesetting tool and also for developing slideshows.

#### SQL

• Used SQL for storing and retrieveing data from webapps.

# TOOLS AND TECHNOLOGIES

#### Linux

- Using Linux as the primary Operating System for the past 13 years.
- Extensively tweaked the OS to match personal and client needs
- Deployed and maintained Linux Systems including web, file and backup servers
- Trained students on Linux basics, shell and managing IoT devices running Linux

#### Git

- Experienced with Git and Gitflow
- Worked on a number of personal and third party projects employing Git
- Trained large number of students on Git

#### ■ Internet of Things

- Experienced with Rasbperry Pi and Arduino
- Used Raspberry Pi for several projects including surveillance
- · Trained students on IoT both inside and outside CET

#### Virtualization

- Experienced with KVM, VirtualBox, Hyper-V, VMWare and Docker
- Extensively used virtual machines for testing and deploying projects

#### ■ 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

#### ■ Mongo DB

Developed an experimental web app for handling data from large number of distress calls

#### Cloud Computing

- Deployed a number of projects onto OpenShift and Digital Ocean
- Used Google Cloud for processing large datasets for ML project

#### pdb

• Used pdb for extensively debugging Python applications

#### Bottle

· Uses bottle as the primary framework for web development

#### NMap

Used NMap for monitoring and finding faults with network

#### **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	<ul> <li>NetDog - dead simple configuration management</li> </ul>	2018
	<ul> <li>Scrapy Project - scrap server info from Hurricane BGP toolkit</li> </ul>	2018
	<ul> <li>Lightup - reaplcement for Intel's xbacklight utility</li> </ul>	2017
	■ Buzzer - Zero cost alternative for quiz buzzers	2017
	■ Bak - Fast, time-stamped archival or present working directory	2016
	■ SaveMyCode - Automated archival of directories upon file change	2015
	■ Weather-Get - Command line application to quickly retrieve and display weather	2014
	<ul> <li>Duplex - Easy double sided printing on normal printers</li> </ul>	2012
	<ul> <li>Modem Reset - Auto reset and reconnect dialup connection upon failure</li> </ul>	2011
INTERESTS	GNU\Linux • Operating Systems • Network Programming • UNIX Philosphy • Shell Internet of Things • Vintage Computing • Virtualization • High Performance Computing	
HOBBIES	Driving • Reading • Collecting vintage computers • Blogging	
VOLUNTEERING	■ Debutsav 2018, CUSAT, Kochi, Kerala	
	<ul> <li>Hasgeek Fifth Elephant 2018, Bangalore</li> </ul>	
	■ Hasgeek Anthill 2018, Bangalore	
	Raspberry Jam Trivandrum 2018, Trivandrum	
	<ul> <li>Debian Stretch Release Party and Install Fest 2017, Cherthala</li> </ul>	
	<ul> <li>Debian Stretch Release Party and Install Fest 2017, Kollam</li> </ul>	
	<ul> <li>Linux installation fest 2017, FSUG-TVM, Trivandrum</li> </ul>	
	■ Free Software User's Group Trivandrum	
	■ Free Software Community of India	
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
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[Last updated on 2018-11-08]

2016

2016

■ Best CS Student Award, Naipunnya School of Management

■ Best Performer Award, Naipunnya School of Management