

Aswin Babu Karuvally

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INTRODUCTION	Free Software enthusiast, developer and trainer, deeply passionate about Network Programming, Operating Systems and IoT. Currently pursuing Masters in Computer Applications	
EDUCATION	College of Engineering Trivandrum , Kerala, India	
	<ul style="list-style-type: none">Master of Computer ApplicationsCGPA: 7.7 / 10	Aug 2016 –
	Naipunnya School of Management , Kerala, India	
	<ul style="list-style-type: none">BSc. Computer ScienceCGPA: 7.9 / 10	Jun 2013 – May 2016
LINKS	<ul style="list-style-type: none">Github: https://github.com/karuvallyGitlab: https://gitlab.com/karuvallyLinkedIn: https://linkedin.com/in/karuvally	
EXPERIENCE	Consultant, DAMAC Solutions , Trivandrum, Kerala, India	Aug 2018 – Nov 2018
	<ul style="list-style-type: none">Tasked with evaluating and deploying cloud backup solution	
	Developer, Project Lifeboat , Kerala, India	Aug 2018 – Sep 2018
	<ul style="list-style-type: none">Developed scripts for removing duplicates from distress call dataHelped in deploying and maintaining serversCoordinated the development team	
	Developer and Admin, KnowledgeBase @ CET , Trivandrum, Kerala, India	Jan 2018 – Nov 2018
	<ul style="list-style-type: none">Deployed easy to use web file manager for storing academic resourcesTasked with maintaining and administering the system	
	Trainer, FestFlick , Trivandrum, Kerala, India	Sep 2017 – Nov 2018
	<ul style="list-style-type: none">Served as resource person for IoT, Python and Linux, Git and Image Processing workshops	
	Student Faculty, IoT Lab, CET , Trivandrum, Kerala, India	Aug 2017 – Nov 2018
	<ul style="list-style-type: none">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
	<ul style="list-style-type: none">maintained http://tvm.fsug.in	
	Developer and Admin, Dextro Systems , Alleppey, Kerala, India	Dec 2015 – Jan 2017
PROGRAMMING	<ul style="list-style-type: none">Developer web applications using Python and BottleDeployed and managed projects on PaaS (OpenShift) instances	
	<ul style="list-style-type: none">Python 2 and 3<ul style="list-style-type: none">Extensively used Python for network programming, system scripting, automation, web development, IoT, image processing, machine learning and web scraping	
	<ul style="list-style-type: none">Shell Scripting<ul style="list-style-type: none">Used BASH as primary language before switching to Python. Developed tools to automate everyday problems such as script for automatically reconnecting dropped dialup connection	
	<ul style="list-style-type: none">C<ul style="list-style-type: none">Used C to convert previously written scripts in Python to increase performance and decrease memory footprint	
	<ul style="list-style-type: none">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.
- **L^AT_EX and Beamer**
 - Used L^AT_EX 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 <i>Proceedings of the International Conference for Control Communication and Computing 2018</i> , Trivandrum India, Jul 2018.
PROJECTS	<ul style="list-style-type: none"> ▪ NetDog - dead simple configuration management 2018 ▪ Scrapy Project - scrap server info from Hurricane BGP toolkit 2018 ▪ Lightup - reaplacement for Intel’s xbacklight utility 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 ▪ Duplex - Easy double sided printing on normal printers 2012 ▪ Modem Reset - Auto reset and reconnect dialup connection upon failure 2011
INTERESTS	GNU/Linux • Operating Systems • Network Programming • UNIX Philosophy • Shell Internet of Things • Vintage Computing • Virtualization • High Performance Computing
HOBBIES	Driving • Reading • Collecting vintage computers • Blogging
VOLUNTEERING	<ul style="list-style-type: none"> ▪ Debutsav 2018, CUSAT, Kochi, Kerala ▪ Hasgeek Fifth Elephant 2018, Bangalore ▪ Hasgeek Anthill 2018, Bangalore ▪ Raspberry Jam Trivandrum 2018, Trivandrum ▪ Debian Stretch Release Party and Install Fest 2017, Cherthala ▪ Debian Stretch Release Party and Install Fest 2017, Kollam ▪ Linux installation fest 2017, FSUG-TVM, Trivandrum ▪ Free Software User’s Group Trivandrum ▪ Free Software Community of India
AWARDS & ACHIEVEMENTS	<ul style="list-style-type: none"> ▪ 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

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