

Nandaja Varma

SOFTWARE ENGINEER ·

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About me

Engineer with 2 years of professional experience.

An open source contributor and a Python hacker with a keen eye for automation & deployment tools and a flair for Natural Language Processing. Bold enough to try out and master different technologies that's right for the job.

Uses C to write distributed systems, Python to automate tasks & write APIs, Ruby on Rails to write web applications, and shell to do everything else.

Technical Skills

OPERATING SYSTEMS

- GNU/Linux (Fedora, Debian and its derivatives, Arch Linux, & similar Linus distros)

LANGUAGES KNOWN

- Python, C, Ruby, C++, Go(Basics), HTML/CSS/Javascript(working knowledge), Java(basics)

DEVELOPMENT TOOLS

- Git, Bash, Zsh, Quilt, Fontforge

SOFTWARE PACKAGES

- Docker, Ansible, OpenStack, MediaWiki, MySQL, Harfbuzz, LaTeX, Gimp, Kubernetes, scrapy

FRAMEWORKS

- Ruby on Rails, Wordpress, Flask(Basics), Hadoop

Experience

Red Hat Inc.

Bangalore, India

ASSOCIATE SOFTWARE ENGINEER(PYTHON, C)

Jan. 2015 - Present

- Implemented numerous Ansible modules to setup the GlusterFS on-demand container provisioning project Aplo for Docker, Kubernetes, Heketi, etc.
- Implemented a deployment automation tool for distributed file system GlusterFS using Ansible. Tool is completely written in Python.
- Co-developed a new logging framework for GlusterFS. Coding was done entirely in C.
- Improved the automated development workflow of GlusterFS using hooks of Bugzilla, Gerrit, Jenkins, etc.

Bang The Table Pvt. Ltd.

Bangalore, India

RUBY ON RAILS SOFTWARE DEVELOPER

May. 2014 - Dec. 2014

- Implemented many enhancement features like survey, pools, etc. to the community engagement platform EngagementHQ for Australian, New Zealand, and Canadian Govt.
- Worked with the customer support team to fix core product issues by meeting SLAs
- Upgraded V2 version of Engagement HQ from Ruby on Rails 3.8 to Ruby on Rails 4.0
- Coordinated numerous meet-ups of different open source communities.

Google Summer of Code

Remote

STUDENT DEVELOPER

June 2013 - September 2013

- Successfully completed the Google Summer of Code project under the organization Swathanthra Malayalam Computing in the domain Natural Language Processing
- Implemented a framework in Python to automatically test the fonts rendered by engines like Harfbuzz, Pango, etc.

Bang The Table Pvt. Ltd.

Bangalore, India

SOFTWARE DEVELOPER INTERN

April 2013 - May 2013

- Helped in internationalizing(i18n) the Ruby on Rails application.
- Helped rewrite the automated deployments of the Ruby on Rails app using Capistrano, Passenger, etc.
- Helped in making the code base better with numerous bug fixes.

Projects & Open Source Contributions

PeARS (Peer-to-peer Agent for Reciprocated Search)

Remote

CORE DEVELOPER. [HTTP://PEARSEARCH.ORG/](http://PEARSEARCH.ORG/)

Oct. 2015 - Present

- Develops an Open Source lightweight distributed search engine using Distributional Semantic techniques for searching and indexing.
- The project has been funded and appreciated by Cambridge university.
- github: <https://github.com/PearSearch/PeARS>

Gdeploy

Bangalore, India

CORE DEVELOPER

Dec. 2015 - March. 2016

- Developed a tool to set-up and deploy GlusterFS using ansible over multiple hosts.
- Wrote and maintain numerous Ansible modules for the upstream Ansible repository.
- <https://github.com/gluster/gdeploy/>

Automated Rendering Testing

Remote

MAIN DEVELOPER

Jun. 2013 - Sep. 2013

- As a part of the Google Summer of Code project, wrote a tool to test the rendering of fonts by engine in Python for the organization Swathanthra Malayalam Computing.
- The tool is heavily being used to font developers and designers for testing their work automatically.
- github: <https://github.com/smc/Automated-Rendering-Testing>

Programmatic creation of PDF books from HTML pages for non-latin scripts

Palakkad, India

DEVELOPER

Jan. 2014 - Mar. 2014

- A Python project to implement PDF exports of HTML content like wiki pages for non-latin scripts like all Indic languages, Arabic etc. This was submitted as the 8th Semester project in college

Debian Diaspora Packaging Project

Remote

PACKAGE MAINTAINER

Jan. 2013 - Mar. 2013

- Involved in the project to package Diaspora distributed social networking site for Debian and its derivative Linux distributions.
- This involved writing tools and other utilities to package more than 500 Rubygems.

Offline wikipedia reader using Hadoop

Palakkad, India

DEVELOPER

Mar. 2013 - May. 2013

- A search on wikimedia dump using Hadoop's Map Reduce and HDFS functionalities. Submitted as 6th semester project in college

Malayalam Wikisource(Grandhasala)

Remote

MEMBER

2013

- Wiki source is the free online library where anyone can contribute.
- Helped in digitizing couple of Malayalam classics.

Gnome

Remote

LOCALIZATION TEAM MEMBER

2013

- Minor involvements with localization projects in my mother tongue Malayalam
- links: <https://l10n.gnome.org/users/nandaja>

Training & Certification

- 2014: Linux Foundation System Administration Training
- 2013: Red Hat Certified System Administration course(RHCSA)

Online
Bangalore, India

Other Achievements & Awards

Google Women Techmaker India

WINNER

2014

- Was one among the 10 winners of Women Techmaker award given away by Google in the year 2014

Linux Foundation Training Scholarship

WINNER

2013

- Won the Linux Foundation Training Scholarship awarded only to 5 people around the world under the category System Administration WhizKid

Red Hat Scholarship

WINNER

2014

- Won a scholarship from Red Hat, where I was completely sponsored to attend the RHCSA training

Presentations & Talks

College of Engineering, Munnar

Munnar, India

OPEN SOURCE CONTRIBUTIONS - WHAT AND HOW?

August 2014

- Presented a talk on scopes and opportunities for engineering student in open source communities

Seminar, NSS College of Engineering

Palakkad, India

DETERMINISTIC PARALLEL PROGRAMMING WITH HASKELL

March 2014

- Presented a seminar that covered basics of functional programming, Haskell and Deterministic parallel programming using it

SMC 12th year event, Sahithya Academy hall

Thrissur, India

UNICODE FONTS AND IT'S TESTING

Oct. 2013

- Presented a talk on Unicode fonts and it's testing using automated rendering testing tool

Devcon - 2013, Model Engineering College

Ernakulam, India

INTRODUCTION TO OPEN SOURCE CONTRIBUTIONS

Oct. 2013

- Presented a talk on open source contributions

PMG HSS, Palakkad

Palakkad, India

SWATHANTHRA MALAYALAM COMPUTING - AN INTRODUCTION

Sep. 2013

- Presented an introductory talk about the organization Swathanthra Malayalam Computing

Women's polytechnic college, Payyannur

Payyannur, India

FREE AND OPEN SOURCE SOFTWARE - AN INTRODUCTION

Sep. 2013

- Presented an introductory talk on FOSS and open source contributions

FOSSMeet NIT Calicut

Calicut, India

RUBYGEM PACKAGING FOR DEBIAN

Feb. 2013

- Presented an introductory talk on packaging Rubygems for Debian at FOSSMeet in NITCalicut

Education

NSS College of Engineering

Palakkad, India

B.S. IN COMPUTER SCIENCE AND ENGINEERING

Mar. 2010 - April 2014

- Presided the Computer Science organization in the college called Abacus for 2 years and organized numerous events and workshops in the college for the students and tutors alike.
- Passed out with a First class Bachelor's degree with a GPA of 7.9 out of 10.

Interests & Hobbies

- Mixed Martial Arts fighter. Takes training in Kick Boxing, Brazilian Jiu Jitsu and Wrestling
- Hobby Cyclist
- Fan of books on fiction(sci-fi mainly) and fantasy
- Free software, Open knowledge and Online privacy evangelist