# Vigneshvar Amarampedu Subramanian

### **Consultant Specialist**

A cloud enthusiast with 6.2 years of overall experience. Have good exposure on designing and developing cloud solutions. With addiction to coding, I have made several contributions to the open source world. Effective team player and quick learner, who continuously seeks opportunities to master new domains and technologies.

## **Core Competencies**

- Technical leadership
- Cloud developer/DevOps
- Continuous Integration and Deployment
- NoSQL database design and implementation

- Release/Deployment Management
- Python Development

## **Tools and Technologies**

- Virtualization
- Cloud
- Bigdata
- C
- C++
- Java
- Python
- Shell Scripting
- Virtual Networking

- Xen/Xen Server
- KVM
- VMware ESXI
- VMware Vsphere
- VMware Vcloud
   Director
- Openstack
- Eucalyptus
- CloudStack

- Hadoop
- Storm
- DRBD
- Cassandra
- Puppet
- MySql
- PostgresSql
- Linux/Windows

## **Recent Project Responsibilities**

- Full Stack developer and a DevOps engineer.
- Designed application, participated in design discussions, and reviewed design artifacts
- Contributed towards development and maintenance of individual components (Python) and database schema design (Cassandra, MySql)

- Cloud Automation Engineer with comprehensive business and technical skill set in emerging cloud computing technologies
- Designing continuous integration and deployment pipelines for end to end automation
- Good understanding of underlay and cloud overlay networks. Strong experience on designing and implementing virtual networks
- Review the developed code and make sure it adheres to the design, standards and guidelines of the client and Virtusa Polaris
- Travelled Onsite to Atlanta, USA for requirement gathering and process implementation.
- Recognized by IT Leadership for Proposal of new ideas and providing solutions
- Handle client communication regarding requirements, design, etc.
- Gather requirements and identify requirement gaps
- Support the onsite team on technical issues
- Manage client delight, and build a strong client relationship
- Participate in meetings related to technical deliveries
- Deploy minor/major releases
- Manage onsite incidents
- Pure agile methodology follower

### **Organizational Responsibilities**

- Mentor and coach junior team members
- Propose new ideas and provide solutions
- Contribute to the development of the Software Engineering competency
- Conduct training sessions and TechTalks

#### **Educational Qualifications**

 B.E in Electronics and Communication(ECE), First Class with 74%, Meenakshi College of Engineering, Anna University (2006-2010)

#### **Achievements & Certifications**

- Recognized by Openstack cloud community as one of the major contributor and sponsored to participate in design summits happening across the World.
  - Openstack Summit in Paris, France
  - Openstack Summit in Vancouver BC, Canada
- Key presenter on various workshops on cloud and big data.

Recognized and awarded by client for project contribution.

## **Projects Worked on at Virtusa Polaris**

Project	Jupiter, First Data Corporation – USA
Role	Senior Consultant
Duration	April 2015 to date
Domain	Cloud Automation
Technology	Python, Openstack, KVM, SALT, AngularJS, Flask, RabbitMQ, Amazon AWS, Ceph, Cloud Foundry, Jenkins, Consul, Linux, Cassandra
Project Description	This project is developed from scratch to provide end to end cloud automation which helps in provisioning a completely ready server for the applications to be hosted. This project involves development of several components which work together to provide an extremely rapid infrastructure delivery.

## **Projects Worked on at Reliance Jio**

Project	Horizontally Scalable Scheduler
Role	Deputy Manager
Duration	April 2014 to March 2015
Domain	Cloud Computing (IaaS)
Technology	Openstack, Python, ZeroMQ, Linux
Project Description	The solution makes use of the messaging layer for scheduling. The outcome would be to decentralize scheduling of compute resources to individual compute nodes, such that this decision making step is scaled out horizontally by the compute infrastructure, and overall complexity is reduced.  Roles and Responsibilities:  Code contribution towards the upstream blueprint.  Following up meetings on blueprint with the community  Unit and Functional testing for the modules developed.  Managing the team and technical decision making on the blue print.

Project	Bug fixes/Reviews in upstream
Role	Deputy Manager
Duration	April 2014 to March 2015
Domain	Cloud Computing (IaaS)
Technology	Openstack, Python, ZeroMQ, Ceph, Contrail, gerrit, Linux
Project Description	There are number of open bugs in openstack. Goal here is to fix/review these problems in the upstream, there by the issue is automatically resolved in the production environment as the system follows continuous integration and deployment.  Roles and Responsibilities:  Regularly scan through open bugs in openstack Reviewing available fixes for bugs Fix bugs and submit to gerrit review system. Follow up discussions to merge fixes.

Project	Deploying Ironic / TripleO
Role	Deputy Manager
Duration	April 2014 to March 2015
Domain	Cloud Computing (IaaS)
Technology	Openstack, Python, ZeroMQ, Linux
Project Description	Ironic is one of the openstack components, which allows openstack to manage baremetal nodes. TripleO (Openstack on openstack) makes use of ironic and various other openstack components to manage and deploy openstack using openstack.  Roles and Responsibilities:  Feasibility study on using ironic (stable version) in production.  Manually installing and configuring ironic.  Identifying and fixing bugs.  Back porting patches to stable versions.
	Documenting the activity.

Project	Auto scaling
Role	Deputy Manager
Duration	April 2014 to March 2015
Domain	Cloud Computing (IaaS)
Technology	Openstack, Python, ZeroMQ, Linux
Project Description	Openstack has the capability to autoscale instances on requirement. This requires configuring various openstack components and creating appropriate templates to autoscale.
	<ul> <li>Roles and Responsibilities:</li> <li>Installing and Configuring Heat</li> <li>Installing and Configuring ceilometers</li> <li>Writing heat templates for autoscaling.</li> <li>Identifying and fixing bugs</li> <li>Back porting patches to stable versions.</li> <li>Documenting the activity.</li> </ul>

Project	Zabbix / Ceph monitoring
Role	Deputy Manager
Duration	April 2014 to March 2015
Domain	Cloud Computing (laaS)
Technology	Openstack, Python, ZeroMQ, Ceph, Zabbix, Linux
Project Description	Ceph is a unified, distributed storage system designed for excellent performance, reliability and scalability. The project involves configuring monitoring system (zabbix) to monitor ceph.  Roles and Responsibilities:
	<ul> <li>Installing and configuring ceph-zabbix plug-in</li> <li>Defining metrics and alarms</li> <li>Documenting the activity.</li> </ul>

Project	Continuous Integration and Continuous Deployment (CI/CD)
Role	Deputy Manager
Duration	April 2014 to March 2015
Domain	Cloud Computing (IaaS)
Technology	Openstack, Python, ZeroMQ, Linux, Ceph, Contrail, Jenkins, Puppet, Consul
Project Description	Openstack is an opensource project and it is continuously evolved by the community. To have upto-date features and critical bug fixes in the system, there is a need for continuous integration and continuous deployment of the change to the production. The project involves designing the flow and automating the system.  Roles and Responsibilities:  Installing and Configuring Jenkins.  Writing heat templates – using structured config and structured deployment.  Writing Jenkins job.  Working on apt-mirror and continuous snapshots  Creating debian packages from upstream code  Writing basic puppet/hiera scripts involved in automation.

## **Projects Worked on at CDAC**

Project	Open Source Cloud Stack (Meghdoot)
Role	Project Engineer
Duration	August 2010 to March 2014
Domain	Cloud Computing (IaaS)
Technology	Eucalyptus, Xen, C, Java, Perl, PostgreSQL, Linux
Project Description	This project includes development and integration of few open source cloud software into a single stack bundled along with a Linux OS (BOSS). Meghdoot is a easy to go tool for installing and configuring cloud software.
	<ul> <li>Roles and Responsibilities:         <ul> <li>Integration of auto scaling module for cloud middleware</li> <li>Integration of a GUI based standalone cloud configuration tool which makes the core of Meghdoot</li> <ul> <li>Modified virtualization tool (xen) to support vertical scaling</li> <li>Made some key enhancements on cloud software - Eucalyptus</li> <li>Deployment and support for Meghdoot in Data Centers</li> <li>Documentation and unit test case preparation</li> </ul> </ul></li> </ul>

Project	Cloud configuration tool for Meghdoot
Role	Project Engineer
Duration	August 2010 to March 2014
Domain	Cloud Computing (IaaS)
Technology	Python (Glade), Linux
Project Description	This is a GUI based standalone cloud configuration tool which is an add-on to Meghdoot. This tool makes easy the configuration of cloud software (Eucalyptus) in step by step fashion.  Roles and Responsibilities:  Designed and developed the GUI using python-wxglade Designed and developed the backend logic for the tool Handled cloud interactions with the tool Exception handling across the tool and cloud software

Project	Auto Scaling module for cloud
Role	Project Engineer
Duration	August 2010 to March 2014
Domain	Cloud Computing (IaaS)
Technology	Eucalyptus, Python, HAProxy Linux
Project Description	This is a module which gives cloud its major property of scalability. Whenever the load on the virtual machines bearing the applications exceed beyond certain upper and lower threshold, Vms are either created or destroyed depending on the need.  Roles and Responsibilities:  Designed and developed the server component for scalability Designed and developed the agent component for virtual machines Integration with Load Balancer Logic for weight handling for load balancing Documentation and unit test case preparation

Project	High Availability Module for cloud
Role	Project Engineer
Duration	August 2010 to March 2014
Domain	Cloud Computing (IaaS)
Technology	Eucalyptus, Xen, C, PostgreSQL, Linux
Project Description	This is module which provides High availability for virtual machines and the nodes. This module interacts with the underlying virtualization technology and the cloud middleware. The complete monitoring, heart beat and ACTIVE/PASSIVE triggers are maintained in this module.
	<ul> <li>Roles and Responsibilities:         <ul> <li>Enhancements on virtualization tool – XEN, to support certain features in the high availability module.</li> <li>Modifying and appending high availability code on open source cloud software.</li> <li>Documentation and unit test case preparation</li> </ul> </li> </ul>

## **Personal Information:**

Marital Status : Single

• DOB : 03/05/1989

VISA information : B1 Visa (USA) - Active

: Schengen (Business) - Expired: Canada (Business) - Expired