



# Sathya Narayanan Balaji

Full stack developer and Open Source enthusiast

## Contact Information

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## Portfolio

<http://sourcepirate.github.io/>

## Github Profile

<https://github.com/sourcepirate>



## Summary

Talented Full stack developer with strong background in programming and 4 years of experience with using cutting edge development tools. Articulate and possess professional communication skills, including formal presentation and technical documentation. Productive in both team-based and self-managed projects. Dedicated to maintaining up-to-date industry knowledge and IT skills.

## Knowledge and Skill areas

- |                                     |  |
|-------------------------------------|--|
| ✚ Software Development Lifecycle    | ✚ Requirements Gathering and analysis  |
| ✚ Object-Oriented Programming       | ✚ Technical and End-user Documentation |
| ✚ Experience in Amazon web services | ✚ Software testing and troubleshooting |
| ✚ Web site Design and Development   | ✚ Experience in working with Agile     |

## Technical Skills

**Programming Languages:** 1) Python 2) Javascript and Nodejs 3) Rust 4) Java

**Backend Frameworks:** 1) Nodejs – a) Expressjs 2) Python – a) Tornado b) Sanic c) Flask d) Django e) Pymongo f) motor

**Frontend Frameworks:** 1) Reactjs 2) Backbone

**Databases:** 1) MongoDB 2) MySQL 3) Elasticsearch

**Cloud Virtualization:** 1) Docker 2) Kubernetes

**IT Automation:** 1) Ansible

**Cloud Providers:** 1) AWS 2) Openstack

## Education

**Masters of Technology in Software Engineering (2018-2020)**  
**National University of Singapore**  
Pursuing the course as a part-time candidate

**Bachelors in Engineering (Electrical and Electronics Engineering) (2009-2013)**  
**Panimalar Institute of Technology (Anna University)**  
First class with CGPA - 8.45/10

The Lomotif logo is written in a stylized, pink, cursive font.The word "FULL" is written in a large, white, blocky, sans-serif font, tilted at an angle.

## Work Experience

### Backend Developer

Jan 2018 – Present

#### Lomotif, Singapore

Lomotif is a fun and easy to use app used by over 12 million users across the globe that churns out over an 100 million videos each and every month. My roles and responsibilities include

- ≡ Developed a notification API for the lomotif app in both android and iOS and achieved very low time for push notifications being sent to the user.
- ≡ Improved the features of existing MUSIC API in lomotif app which facilitates purchasing music from itunes.
- ≡ I Work on django, postgres, redis, memcached, elasticsearch, nginx, aws, heroku, docker, slack, gitlab, trello as a part of my development.

### Lead Software Engineer (Full Stack Developer)

#### CISCO Systems

Jan 2017 –Dec 2017

My roles and responsibilities include

- ≡ Converting monolithic web applications into micro services.
- ≡ Data driven analytics using ELK (Elastic search log stash and kibana).
- ≡ Designing distributed container infrastructure using Kubernetes.
- ≡ Developing tool chains to maintain the infrastructure using python.
- ≡ Developing code base to parse log for log analytics.

### Full Stack Developer

May 2014 – Jan 2017

Full Creative ( <https://www.synclio.com/> )

Worked on designing and implementing an Interactive Voice Response (IVR) system for Synclio, A Business Phone System using Google App engine and Twilio, a simple and powerful API that embeds Messaging, Voice, Video, and Authentication.

- ≡ Learned to get the most out of google app engine for a given application or product.
- ≡ Designed and implemented a multiuser video conferencing system using webRTC technology.
- ≡ Contributed software engineering expertise in the development of the product through the software lifecycle, from requirements definition through successful deployment.
- ≡ Excelled in rapid application development and management of technological issues for the product, earning the highest customer satisfaction rating for all solutions delivered.
- ≡ Introduced methodologies and best practices that enhanced product definition, release processes and customization of applications to user needs.

## Software Engineer

May 2013 – May 2014

Capgemini India Pvt Limited (<https://www.medassets.com/>)

Worked on building an automation test framework for Medassets HealthCare organization.

- ≡ Wrote automation test frameworks using Test Complete tool.
- ≡ Worked on Rally, an agile tool to accelerate the pace of innovation, improve performance, and respond effectively to evolving competitive markets and customer needs.
- ≡ Designed and implemented automated testing tools and programs addressing areas including database impacts, software scenarios, regression testing, negative testing, error/bug retests and usability.
- ≡ Documented software defects using bug tracking system and reported defects involving program functionality, output, online screen and content to software developers.
- ≡ Delivered thorough QA testing reports that determined product quality and release readiness.

### GitHub link:

<https://github.com/sourcepirate/MDB>

### GitHub Link:

<https://github.com/strawhatpirates/arena>

### GitHub Link:

[github.com/sourcepirate/taskqueue](https://github.com/sourcepirate/taskqueue)

### GitHub Link:

[github.com/sourcepirate/chakravyuga](https://github.com/sourcepirate/chakravyuga)

## *few of my Github Projects*

### 1. 'MonDB' - Object Relational Mapping (ORM) for MongoDB

**Programming Languages:** Python

**Databases:** MongoDB

**Description:** Developed lightweight ORM models for MongoDB using python.

### 2. 'Arena' – A Multi-Party Video Conferencing Application

**Programming Languages:** Node.js, socket.IO.

**Databases:** MongoDB

**Description:** Developed a Peer-to-Peer video Conferencing Application using WebRTC technology. Once the peer-to-peer connection is established, the Video Stream from the camera can be obtained using the local browser's getUserMedia API and delivered to multiple peers for Video Conferencing.

### 3. 'TaskQueue.js' – Implementation of Task Queue using Node.js

**Programming Languages:** Node.js

**Description:** Applications can perform work outside of a user request, when initiated by a user request. If an app needs to execute some background work, it can make use of Task Queue.

**GitHub Link:**

<https://github.com/sourcepirate/Ajaxy-Websockets>

**GitHub Link:**

<https://github.com/strawhatspirates/pdfmyurl>

**GitHub Link:**

<https://github.com/sourcepirate/yql>

**GitHub Link:**

<https://github.com/sourcepirate/pycache>

**GitHub Link:**

<https://github.com/roguecricket/Rcradar>

**GitHub Link:**

<https://github.com/sourcepirate/bob>

#### 4. 'ChakraVyuga' – An Efficient Resource Routing Algorithm

**Programming Languages:** Node.js

**Description:** Consider n tasks to be done by m resources, with each task having their own custom skills. The Algorithm will route the tasks to one of the 'm' available resources. It selects the appropriate resource based on the skills required for completion of the task as well as the resource availability.

#### 5. 'Ajaxy -Websockets'

**Programming Languages:** Node.js

**Description:** Contributed to this open-source project which enables software developers to make use of ajax request as a fallback if the websocket request for the route is not found.

#### 6. 'PDFmyURL' – PDF generator from URL

**Programming Languages:** Node.js

#### 7. 'Yql' – Yahoo Query Language

**Programming Languages:** Python (Request Library)

**Description:** Designed and implemented a thin API Client library for Yahoo Query Language.

#### 8. 'pyCache' – Least Recently Used Cache Implementation

**Programming Languages:** Python

**Description:** Designed and implemented a faster in-memory cache for storing already computed results.

#### 9. 'RC RADAR' – Web app for Gathering members for a cricket tournament

**Programing Languages and Frameworks:** Pymongo, motor, tornado

**Description:** Provides details of cricket tournament hosted near by your location. The Webapp is equipped with google maps API to support the players to reach the tournament's location.

#### 10. 'Bob the builder'

**Programming Languages:** Rust

**Description:** Builds Linux distro OS binaries from source files.

**GitHub Link:**

<https://github.com/sourcepirate/data-style>

**11. 'data-style'**

**Programing Languages and Frameworks:** beautifulsoup, asyncio, phantomjs, selenium

**Description:** A structured scrapper written on top of beautifulsoup and asyncio. Also provides javascript support(optional) through phantomjs and selenium.

***Achievements***

- Awarded Academic Proficiency award for year 2013.
- Runner up of SPI Hackathon conducted by SPI Cinemas in Chennai.
- Runner up in 2017 edition of "save the hacker" conducted by Freshdesk.
- Second prize in the Hackathon conducted by "Full Creative technologies".

**Personal Details**

**Date of Birth:** 05-Aug-1992

**Age:** 24 Years

**Languages Known:** English, Tamil

**Declaration**

I hereby declare that the information presented above is true to the best of my knowledge.

Date: 03/9/2017

Sathya Narayanan Balaji