

## Resume Summary

Name: Sunil Kumar

Personal website: <http://www.sunilnkumar.com/>

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Email id: sunilkumar.gec56@gmail.com

Current Location: India - Ernakulam

DOB: 22/Apr/1988

Gender: Male

Github: <https://github.com/sunilkumarn>

## Resume Details

Key Skills: Ruby, Javascript, Rails, RubyMotion

Database: Mysql, Sqlite

Nosql: Redis, MongoDB

Logging: Facebook scribe.

Big data management: Hive

Other Languages: Python, html, css, javascript( jquery, ember.js), node.js, awk, shell.

Platform: UNIX, OSX, IOS

## Professional Details

Work Experience: 3 yrs.

Functional Area: Web development

Area of Specialization (AOS Experience): Web & Backend Development In Ruby & Rails.

Current designation: Senior Software Engineer

Current Employer: Mobme Wireless Solutions Pvt Ltd.

## Qualification

ICSE Board examinations with 88% marks ( 2004 batch )

ISC Board examinations with 87% marks ( 2006 batch )

Highest Degree/Diploma: BE/B.Tech Specialisation: Computers with 64% marks ( 2010 Batch )

Institute : Calicut University

## Detailed Resume

### Professional

- Has undertaken or been a part of 6 - 7 web projects for leading telecoms in the country. As per the technical part, the project involves in depth understanding of Ruby frameworks like Sinatra and/or Rails. The MVC nature has been maintained throughout the Project and Yehuda Katz's view of Skinny controllers fat models has been given thought and implementation. The restfulness has been adhered to. Satisfied the billing requirement

logics of multiple clients. Have worked in tandem with clients like IBM to satisfy the billing requirements of Telecom companies.

- Built quite a lot of apis to serve the backend purposes for web, mobile as well external external applications.
- Looked into the scalability issues that came up with application deployments. Ported apis that were benchmarked at 500 TPS. Since Ruby couldn't provide the necessary TPS was required, the application was ported into Node.js. Use of Nosql database Redis was also made to make this happen. The api requests were cached into redis and all other processes(including DB lookups and logging using scribe) were deferred. This helped in attaining the required TPS.
- Currently working on an exciting mobile application using RubyMotion.
- Have been actively involved in technical discussions, meetings & follow ups with telecom giants like Airtel, Vodafone, Idea etc and also major banks across the nation.

### **Academical**

Implementation of a simple evaluator for Scheme in Python

The metacircular evaluator for the Scheme language is explained in the classic CS text Structure and Interpretation of Computer Programs . A simple version of this evaluator was written in Python.

### **Analysis Of TinyPython Virtual Machine v1.1**

TinyPython is a minimalist implementation of Python in 64K written by Phil Hassey. The working of the TinyPy VM was traced with ctags/gdb. The representation of a list in the VM was studied. The objective was to gain experience working with real code and also to understand the way an interpreter actually works.

### **An AVL tree implementation for Python in C**

An AVL tree data structure was implemented in C; this was interfaced to Python using SWIG.

### **Network simulation using the NS2 tool**

The Network simulation tool NS2 was used to model different network topologies.

### **A minimal LOGO like system in Python**

PyLOGO is a very simple program to create geometrical shapes on a Tkinter canvas . It was implemented using Python, with abilities to move a given distance, turn a given angle clockwise or anticlockwise, show or hide a moving figure of arbitrary shape, decide between pen down and pen up modes.

## **Study of the introspection mechanisms available in Python**

The working of the builtin unit testing framework in Python, the unittest module, was studied. A toy version of the same was implemented by writing a small Python script. The objective was to study the utility of the introspection mechanisms available in Python.