

*I started writing code in school, then completed Bachelors in Information Technology. My look towards programming completely changed after learning Python. Language provides me to express the solution in elegant and concise syntax.*

*I like to build tools which simplify the process and workflow. I enjoy contributing code to open source and teaching new developers how to code.*

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## Technical Skills

**Likes:** linux python flask django rust erlang

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## Experience

**Lead Python Developer** – 7cstudio May 2015 → Sep 2016  
python, flask, sqlalchemy, redis, rabbitmq, cassandra, mysql, gevent, amazon-ec2, salt-stack

I worked on building Python based a backend for a real-time mobile messaging application. The mobile app let the users have private conversation and anonymous public conversation.

The mobile clients connected to the backend using web sockets and API. Cassandra stored all user messages, and MySQL stored user, chat, and device specific information.

I automated the infrastructure setup for managing Python workers, web socket servers, API servers using Salt Stack configuration management and managed Cassandra clusters, MySQL and Redis. I was the primary owner of all backend technologies.

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**Software Engineer** – Recruiterbox Jan 2014 → May 2015  
python, django

Recruiterbox is single page app built using Python Django, TastyPie and Backbone.js.

A feature is split into multiple stories. Each story has a well defined scope. Top down approach is taken to write the code. Coding process follows TDD. Testing libraries `selenium`, `mock`, `py.test` are used.

Built API's using TastyPie, Puppet for system deployment. Integrated external service like Google Calendar, Intercom, Pipedrive, Stripe.

Main responsibility is delivering the features with well designed interfaces, unit test, integration tests.

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**Code Chimp** – HasGeek Media LLP Jul 2012 → Dec 2013  
python, flask

HasGeek builds discussion space for Geeks. Discussion spaces can be both online and offline. As a result technology is required to connect the missing dots.

There were multiple projects helped to achieve this. Few of the projects are [hacknight](#) and [hasgeek.tv](#).

Hacknight helps event organizer to track participants info, projects who attend hackathons. Hosted solution can be found at <https://hacknight.in>.

Hasgeek.tv is one stop place to organize the videos and slides of the conference. One of the interesting feature is syncing of slides and videos with json config. Hosted solution can be found at <https://hasgeek.tv>.

All the projects used Flask, SQLAlchemy, Postgres. Occasionally configured Ubuntu machines, nginx, uwsgi.

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**Associate System Engineer** – IBM India Pvt Ltd Jul 2011 → Jul 2012  
c#

Migrated .NET 2.0 runtime applications to .NET 4.0 to cloud based services.

The services were running on different type of servers like UNIX, IBM. The frontend was GUI application built using Power Builder. All of the technologies were obsolete at the time of migration.

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**Primary Coder & Co Founder** – Blue Buddha Corp Sep 2010 → Jul 2011  
php, ruby-on-rails

This was my first startup. I was only tech person in the startup. Entire Frontend, Backend, servers were managed by me.

Happy School was small school management system built to simplify the communication between teachers, students, parents. The product was focussed on city side schools.

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## Education

**Programmer** – Recurse Center  
python, rust, erlang

Sep 2016 → Current

At Recurse Center, I am learning network programming and distributed systems. The current project is, [edht](#) - a distributed hash table in erlang based on Amazon's DynamoDB paper. The previous projects were [BitTorrent client](#) in Python and [imon](#) - command line tool to classify the internet traffic based on domain name. The imon project uses rust and pcap library to capture the wifi packets.

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**B.Tech -Information Technology** – Amrita Vishwa Vidyapeetham - Coimbatore  
c, c++, networks, parallel-processing, database, operating-system, compilers, ooad, internet-technologies

2007 → 2011

CGPA = 7.27.

- Speaker of IEEE session on 'programming at the speed of light - pythonism ' 2 day workshop.

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## Projects & Interests

**Stack Overflow** – <http://stackoverflow.com/users/311413/kracekumar>  
Written 129 answers. Active in flask, python and dictionary.

2010/04 → Current

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**imon** – <https://github.com/kracekumar/imon>  
rust, pcap, multithreading

Oct 2016 → Current

Imon is a command line tool to monitor wifi traffic and classifies the traffic by domain name. The client can query classified data for later usage by domain names or for a given date.

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**hacknight** – <https://github.com/hasgeek/hacknight>  
javascript, python, flask, flask-sqlalchemy, postgresql-9.2

May 2012 → Dec 2013

<http://hacknight.in> is place to organize the hackathon. The hacknight owner list the hacknight and participant can join the hacknight. After approval the participants can list down their projects and comment on other projects.

Most of the views and python code was written by me. The project heavily uses server side code and very minimal javascript.

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**simpleurl** – <https://github.com/kracekumar/simpleurl>  
python

Nov 2012 → Dec 2012

SimpleURL is based on werkzeug.routing for brubeck - Escape from Regex

<http://brubeck.io> is one of the fastest python framework. The routing declaration is very similar to Django syntax. One of the biggest problem of regex is easy to commit mistakes and ugly syntax.

Werkzeug routing abstracts the regex with human friendly api. The projects glues werkzeug routing and brubeck framework.

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## Public Artifacts

**class as decorator - Random stream** – <http://kracekumar.com/post/101540141725/class-as-decorator>

Decorator is a callable which can modify the function, method, class on runtime. Most of the decorators uses closure but it is possible to use class.

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**Python global keyword - Random stream** – <http://kracekumar.com/post/100399630630/python-global-keyword>

Python global keyword behaviour

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**Fluent interface in python - Random stream** – <http://kracekumar.com/post/100897281440/fluent-interface-in-python>

Fluent Interface is an implementation of API which improves readability.

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## Tools

**Favorite Editor:** Emacs