



# K Naveen Kumar

## Software Developer with Research Appetite

I am a software Developer interested in android and web development. Enthusiastic in doing research, in the area of Cloud computing, IoT, Machine Learning, Deep Learning. Passionate towards realistic portrait sketching.

### Address

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Vikarabad District,  
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### Mail

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gmail.com

### Links

linkedin.com/in/naveen-  
kumar-a035a2129/  
github.com/hope4  
facebook.com/NkXplore/

### Programming Skills

Python ★★★★★  
Android ★★★★★  
PHP ★★★★★  
Postgresql ★★★★★  
IOT Program-  
ming ★★★★★  
C ★★★★★  
Matlab ★★★★★  
Java ★★★★★  
HTML CSS ★★★★★  
Latex ★★★★★

### Coursework

Computer Vision  
Embedded Systems  
Pattern Recognition  
Computer Organisation  
Introduction to AI  
Compiler Design  
DBMS  
Design of Algorithms  
Operating systems  
Data Structures

## Experience

- 07/18 - now **Project Intern** IIT Hyderabad  
Working on a project called real time two-wheeler helmet detection using YOLOv3(a deep learning concept).
- 01/18 - 06/18 **Internship as Innovator** Digital Impact Square  
Worked as a data analyst on a developed digitized solution on a social challenge through Design thinking, Innovation.

## Research

- 05/17 - 07/17 **Research Internship on Resource Management using Weighted Fair-Share Queuing in Heterogeneous Cloud Computing System** IIT Vadodara  
**Mentor:** Dr. Reshmi Mitra (previously - Asst Prof, now - Postdoctoral Fellow at University of Missouri-Columbia, USA)  
Resource management algorithm for datacenter consolidation to allocate memory, network and computational resources for heterogeneous virtual machines. The proposed algorithm performs better on throughput related metrics w.r.t. standard algorithms such as shortest job first (SJF) and First-Come-First-Serve (FCFS).
- 03/18 - Now **Workload Management for Fog Computing using Weighted Fair-Share Queues**  
**Mentor:** Dr. Reshmi Mitra, **Team Member:** Jishnu Jaykumar P (Project assistant at RBCCPS, IISC Bangalore)  
Ongoing project to extend previous work into IoT systems for managing Skills trade-off problem between fog computing and cloud-offloading.

## Education

- 2014 - 2018 **B.Tech in Computer Science and Engineering** IIT Vadodara  
CPI : 8.97/10
- 2012 - 2014 **Twelfth in MPC** Sri Chaitanya Junior College, Hyderabad  
97.7%
- 2011 - 2012 **SSC** New Nalanda High School, Tandur  
GPA : 9.8/10

## Projects

- 01/17 - 05/17 **Core#-A Compiler** IIT Vadodara  
[github.com/hope4/Compiler-Design-codes](https://github.com/hope4/Compiler-Design-codes)
- 08/16 - 12/16 **Cerious, A tool which converts natural language to C code** IIT Vadodara  
[github.com/hope4/Project-Cerious](https://github.com/hope4/Project-Cerious)

## Personal Skills

Prob.solver ★★★★★  
Initiative ★★★★★  
Teampayer ★★★★★  
Leadership ★★★★★  
Organising ★★★★★  
Design ★★★★★  
Thinking ★★★★★

## OS Preference

GNU/Linux ★★★★★  
Windows ★★★★★  
Mac OS ★★★★★

05/16 - 12/17 **IOT Projects**

IIIT Vadodara

3D(6x6x6) LED display controlled by arduino micro controller, smart house, automated irrigation system, automated railway gate opener.

[youtube.com/watch?v=cHeYvsKsbz8](https://www.youtube.com/watch?v=cHeYvsKsbz8), <https://github.com/hope4/IOT>

## Publications

K. N. Kumar, R. Mitra, "Resource Management using Weighted Fair-Share Queuing in Heterogeneous Cloud Computing System", *IEEE International conference on cloud computing in emerging markets (CCEM)*, 2018 (under review).

## Awards & Achievements

- 2016 **Secured Scholarship** Intershala VTC Scholarship  
Among 4000+ applicants based on excellence in academics.
- 2016 **Stood 3<sup>rd</sup> in hackathon** Google Facilitator  
As a part of workshop on Applied CS with android.
- 2012 **Secured 2<sup>nd</sup> among 200 participants** Dist. Level Essay writing  
Held by Election commission of India on National Voter's day.

## Certifications

- 09/2018 **Building Web Applications in PHP** University of Michigan (Coursera)  
Learnt Basic web applications in php using XAMPP server.
- 08/2018 **Build Your First Android App (Project-Centered Course)** Centrale Supélec (Coursera)  
Built an Android app called X\_Math as final project.
- 02/2018 **Introduction to IOT and Embedded Systems** University of California, Irvine (Coursera)  
Learnt Basics of IOT and Embedded systems.
- 12/2017 **National Workshop on Entrepreneurship, Employability, Soft skills and inclusiveness** FAEA
- 9/2017 **Applied CS with Android** Google Facilitator

## Other Info

- 2015-2016 **ART Club Secretary** IIIT Vadodara  
Organized events held in college.
- 2009-2011 **Senior Cadet in NCC** New Nalanda High School  
Done volunteer Services.
- 2016-Now **Realistic Sketching** NK\_Xplore  
Running an active Facebook page called NK\_Xplore with a total of 328 followers and a website called SketchIFY, doing realistic sketching of peoples' faces on charge basis.  
[facebook.com/NkXplore/](https://facebook.com/NkXplore/), [sketch-ify.weebly.com/](https://sketch-ify.weebly.com/)