

## Interests:

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Data Structures and Algorithms, Artificial Intelligence, Web Programming, Operating Systems

## Education:

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### National Institute of Technology Calicut

June 2013 – May 2017

- Bachelor of Technology, Computer Science and Engineering; CGPA – 8.17/10 (up to 6<sup>th</sup> Semester)
- Courses undertaken: Data Mining, Computational Intelligence, Data Structures and Algorithms, Operating Systems, Design of Algorithms, Theory of Computation, Database Management, Computer Networks, Compilers

### Rato Bangala School, Lalitpur, Nepal

June 2010 – June 2012

- Cambridge International Examinations Advanced Level Certificate, Education Board of United Kingdom; Credits earned: 9
- Courses chosen (Grades obtained): Physics (A), Chemistry (A), Biology (B), Mathematics (A\*), General Paper (C)

## Internship Records:

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### Summer Intern

J.P. Morgan Chase & Co., Hyderabad

16<sup>th</sup> May 2016 – 15<sup>th</sup> July 2016

- Worked to deploy a production-ready web app based on Spring Framework that shows the detailed status of each running batch applications on a server.
- Learnt about the various other technologies, like AWS, Hadoop, Robotics Process Automation (RPA) used by the company. Participated in several technical sessions organized by different teams

## Programming Languages and Software:

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*Medium Level Proficiency:* C, C++, Git, Github, x86 Assembly Language, Adobe Photoshop, Linux, Windows, PHP, Android

*Familiar:* Python, Java, Spring Framework, MySQL, MIT Scheme (LISP), HTML & CSS, Bash

## Online Courses:

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- Ongoing Course: *Android Nanodegree Program* (Received scholarship to complete the program) by Google and Udacity
- *Machine Learning* by Prof. Andrew Ng, Stanford University, Completed February 2016
- *How to use Git and Github* by Udacity; Completed June 2015
- *Algorithms Part I* by Stanford University; Completed April 2014
- *Creative Problem Solving* by University of Minnesota; Completed February 2014

## Projects:

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1. **Simple Integer Language (SIL) Compiler:** Part of the Compiler Lab course where I built a compiler in C language using tools like YACC and LEX for a custom-built Simple Integer Language.  
(<https://github.com/pbhopalka/SIL-Compiler>)
2. **Account Management System for Small Business:** Part of the Database Management course where I built a system for managing accounts of customers and keeping track of their bills, payments. Also it has a daily ledger useful for auditing purposes.  
([https://github.com/pbhopalka/Account\\_Management](https://github.com/pbhopalka/Account_Management))
3. **ExperimentalOS (also called XOS):** Part of the Operating Systems Lab course where I built a toy OS from scratch using few modules given to us by our professor. Implemented Process Management, File Management, Memory Management and Disk Management Systems for the OS  
(<https://github.com/pbhopalka/ExperimentalOS>)
4. **Debugger Platform:** Improving the existing platform for conducting Debugger – an online debugging event hosted by NIT Calicut during their annual techno-management fest, Tathva  
(<https://github.com/pbhopalka/Debugger>)

## Technical Activities:

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- **Joint Secretary** at Computer Science and Engineering Association, NIT Calicut – the official student body coordinating activities of the Department of Computer Science, NIT-C
- **Joint Secretary** at Indian Society for Technical Education, NIT Calicut Students' Chapter for 2015-16
- **Conducted a Linux Workshop** for the students of NIT Calicut (August 2015), slides available at (<http://osonitc.github.io/LinuxWorkshop/Slide/vim>)
- **Conducted a series of lectures/hands on sessions** on C++ Programming Language as an initiative of Computer Science and Engineering Association, NITC (Feb 2015- April 2015)
- **Problem Setter for CodeMaestros** (a bimonthly Coding challenge) organized by NIT Calicut on HackerEarth
- **Conducted a workshop on Python** for beginners for the First Year Students of NIT Calicut
- **Organized FOSSMeet 2016** – A national conference to discuss the recent trends in the Open Source Domain and learn new open source technologies
- **Attended Google Developer Group DevFest** organized by Google Developer Group Kozhikode in NIT Calicut in November 2014
- **Organized Spectrum 2014 and 2015**, an inter-branch technical extravaganza for First Year Students of NIT Calicut

## Other Activities:

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- **Chartered the Interact Club of Rato Bangala** (Rotary International District 3292); Position held: Charter President; August 2010-June 2011
- **Coordinating Committee Member** of International Educational Conference organized by Rato Bangala Foundation held on April 4<sup>th</sup> – April 7<sup>th</sup> 2013