# Santosh Kumar Aenugu

2675 Park Ave, Santa Clara, CA, 95050

(541)-745-9012 | a.santoshkumar1995@gmail.com | linkedin.com/in/santu95/ | github.com/ASK1995

#### **EDUCATION**

Oregon State University, Corvallis, OR

September 2017 - June 2019

Major: Computer Science, M.Eng (Overall GPA 3.6/4.0)

Coursework: Database Management Systems, Software Engineering, Computer Architecture, Theory of Computation, Distributed Systems, Cyber-Security, Artificial Intelligence, Deep Learning

Birla Institute of Technology and Science, India

August 2013 – May 2017

Coursework: Machine Learning, Data Structures, Algorithms, Operating Systems, Computer Networks, Cryptography

### **SKILLS**

Languages: Python, C, JavaScript, Java, C++, SQL

Technologies: Hadoop (HDFS, MapReduce), HTML/CSS, Git, Unix

#### PROFESSIONAL EXPERIENCE

## Oregon State University

September 2017 – June 2019

- 1. Developed web App for Thumbnail Preserving Encryption (TPE) of images in 40 48 seconds using JavaScript
- 2. Developed Multithreaded Android App for enhancing performance of TPE to 6 10 seconds using Java
- 3. Improved performance to cut run-time by 75% in comparison to single-threaded web-app
- 4. Integrated authentication features of the application using Firebase Google API
- 5. Handled photo features using Bitmaps in Java for manipulating pixel data
- 6. Followed best quality practices of Test- Driven Development (TDD) using unit tests, integration tests

#### **PROJECTS**

## Course Review System (rkbeavs.me/ryc)

- 1. Developed Full Stack Web application to read and write reviews for 500+ courses at OSU
- 2. Web Scraped the courses related data using Python libraries (Pandas, numpy, beautiful soup)
- 3. Granted users access by authenticating their respective OSU login credentials and allowing anonymity
- 4. Followed tech stack of HTML5, CSS3, BootStrap, jQuery, JavaScript (Node.js, React), AJAX, Restful Webservices
- 5. Practiced Scrum based Agile methods collaborating with Git for code reviews and commits
- 6. Responsible for managing the team to follow agile methodologies as a ScrumMaster for 1st Sprint

## MapReduce Engine

- 1. Ran MapReduce algorithm with master and worker nodes on single-node cluster in Hadoop HDFS using Jython
- 2. Extracted word and pair counts of large datasets using streaming API to pipeline data from mapper to reducer

## Raft Consensus Algorithm

- 1. Implemented Raft Consensus Algorithm for fault-tolerant asynchronous distributed systems in Python
- 2. Developed leader election, re-election, log-append, log-replication and log-matching properties

#### **HONORS AND AWARDS**

- 1. Won Bronze Medal in Chess during National Sports Fest (Arena)
- 2. Won Honorary award from EECS(Electrical and Computer Science Department) at Oregon State University