

# VARUNSRIVATHSA VENKATESHA

700 Health Sciences Dr,  
Stony Brook, NY-11790.

Ph: +1(352)8702372  
[varunvenkatesha@gmail.com](mailto:varunvenkatesha@gmail.com)  
[www.github.com/Varunsrivathsa](https://www.github.com/Varunsrivathsa)  
[www.linkedin.com/in/varunsrivathsa](https://www.linkedin.com/in/varunsrivathsa)

## EDUCATION

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**Stony Brook University**, Stony Brook, NY  
MS, Computer Engineering  
Graduate Coursework: Pattern Recognition and Data Mining, Mobile Cloud Computing, Wireless Network  
Analysis of Algorithms, VLSI CAD, Network Algorithms  
GPA: 3.63/4  
August 2015 – December 2016

**PES Institute of Technology**, Bangalore, India  
B.E, Electronics and Communication  
GPA: 8.64/10  
September 2011 – May 2015

## TECHNICAL SKILLS

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**Programming Languages:** Java, Python, C++, C, System Verilog  
**Web Technologies & Frameworks:** Django, Flask, JavaScript, HTML, CSS, REST API, jQuery, Bootstrap  
**Database:** SQL, MySQL, SQLite  
**Tools:** Google App Engine, Git, Jira, MATLAB, Wireshark  
**IDE/Editors:** Android Studio, Eclipse, PyCharm, CodeBlocks, Vim  
**Operating Systems:** Linux/ Unix, Windows

## EXPERIENCE

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### FILTREST

Backend Developer, Summer Intern  
June 2016 – August 2016

- Designed and developed algorithms for scoring and consequent organization of Web articles, Facebook and Twitter feeds based on relevance and popularity.
- Implemented an API to deliver these scores as RESTful web service. (Django)

### STONY BROOK UNIVERSITY

Teaching Assistant  
January 2016 – May 2016

- Course: Software Techniques for Engineers (C++, Data Structures and Algorithms).
- Responsibilities: Helped design the course, prepared materials, graded projects and assignments.

### INDIAN INSTITUTE OF SCIENCE, CENSE

Intern  
June 2014 to August 2014

- Developed a cost effective breath analyzer using MSP-430 micro-controller and TGS-2602 sensor.
- Designed efficient algorithms which analyze sensor values to increase selectivity of the required gas.

## ACADEMIC PROJECTS - [github-handle](#)

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### Digital Diary - Android Application (Android Studio, Java, SQL, Google App Engine, Python, Flask)

- Digital diary, an android application which can store emotions and interests in the form of text, audio and images.
- Google Cloud SQL was used to store user profile and text. Drive API was used to store images.
- Implemented API's for retrieving history, authentication, deleting entries and saving data.

### Shopping Website (Python, Flask, HTML, CSS, SQL, JSON, ORM, REST API)

- A web application that queries database and dynamically generates complete item list in the form of web pages and API endpoints. JSON data is sent when the API end points are accessed.

### Frequent Pattern Mining (Java)

- Generated frequent item sets from datasets in [UCI Machine Learning Repository](#).
- FP Tree and Conditional FP Trees were created to extract frequent item sets after two passes over datasets.

### Decision Tree Generation (Java)

- Built a classifier to classify datasets in [UCI Machine Learning Repository](#). Constructed decision trees for the same.

### Data Cube Formation (Java)

- Star-cubing algorithm was used to extract data from input files containing 12000 tuples to form data cubes.

### VLSI-Design Tool (C++)

- Developed a tool which does partitioning, placement, and routing of VLSI circuits.
- Input benchmark files containing over 12000 nodes were used to test the tool.