

## Varun Rao

■E-mail: Varun.Rao@stonybrook.edu ■ Phone: (347)-421-9481 ■GitHub: <https://github.com/ViRaL95>

■LinkedIn: <https://www.linkedin.com/in/varunrao95>

---

## EDUCATION

---

■ **Stony Brook University** – Stony Brook, NY

*Expected Graduation: May 2018*

*Double Major: Computer Engineering & Applied Mathematics and Statistics*

*Deans List: Fall 2014, Fall 2016*

■ **Personal Website-** <http://www.varun-rao.net/>

---

## PROGRAMMING LANGUAGES AND SKILLS

---

- HTML5(**expert**), CSS3(**expert**), Angular.js(**proficient**), PHP (**proficient**) in LAMP environment, Node.js (**proficient**), Python (**proficient**) (in Django Environment), WordPress(**prior experience**), Javascript(**expert**), JQuery(**proficient**), SQL(**proficient**), Bootstrap(**proficient**), REST API's, Linux(**proficient**), Mac OSx(**expert**)
- Object Oriented Java Programming w/ Data Structures(**expert**), C programming(**proficient**), C++ Programming(**proficient**), MATLAB(**expert**)
- AVR Assembly (**very skilled**)
- GitHub and Fundamentals of Version Control
- Ability to work in an Agile Development Environment (**prior experience**)
- Android Mobile Development Experience (**current course project**)

---

## EXPERIENCE

---

■ **Full Stack Developer Intern for The Statesman** (*Arielle Martinez-516-640-0590*)

September 2016- Current Date

- Built the backend and parts of the frontend for the Statesman's scoreboard on its homepage using Javascript, HTML5, AJAX(JQuery) and CSS3 and converted it into a text-widget. The widget is currently on the homepage.
- Worked alongside a team of software developers to fix bugs and issues with PHP code, and issues with WordPress Plugins and themes.
- Managed the Team's GitHub account.

■ **Coeo Labs Pvt. Ltd Internship** *Located in Bangalore, India (Nitesh Jangir- nitesh@coeo.in)* July 2015- September 2015

- Worked alongside doctors and a team of mechanical and electronic engineers to design and build a system to prevent Ventilator Associated Pneumonia (VAP). Analyzed the design of the medical device used for curing this infection and proceeded to build his own circuits to get an understanding of the electronic portion of the design. Built Infra Red Sensors, Tone Generators and Over-Heat Detectors to understand Design Concepts
- Sat in on meetings to discuss potential designs and safety concerns that engineers must account for in the design of a product in the medical field
- Coeo Labs recently has begun doing research with Harvard University in Boston

■ **Research for the Electrical Engineering Department**

July 2016-December 2016

- Built and Designed the circuit board for a medical device that sense muscle growth in patients that have recently undergone surgery
- Worked with Engineers and understood underlying principles of safety and good practices to follow.

■ **Organizing MetroHacks**

- Currently working with a team of friends to organize the New England's premier Hackathon Event
- Developing skills in organizing, marketing and fundraising money for large scale events

---

## PROJECTS

---

**Currently Developing a Blog using Python (Django Environment), Angular.js and Backbone.js-** Currently building a blog which I can use using Python, Angular and Backbone, and Jinja Templating Language.

**Built own Personal Website using HTML, CSS, and CASS (Personal Project)** <https://www.varun-rao.net> - Created a portfolio website to showcase his Electrical Engineering projects, and contact information.

**Constructed a Medicine Management Website (Personal Project)** <http://www.viralmedcompany.com/> -Created a WebPage using HTML, CSS, and BOOTSTRAP, Javascript, JQuery, Angular.js, and Ajax to create a dummy shopping cart style website which allows accessories such as user login, information about author, and responsive user interface. The library Vex.js was also used for UI design. The entire construction of this Website was done in a LAMP environment

**Built the Backend/ Portions of the Front End of the Scoreboard on The Statesman's Homepage** - Built a scoreboard that parses an RSS feed using YQL (Yahoo Query Language) and Javascript with info about Stony Brook SeaWolves games, and has selectors that organize elements of the table depending on Gender and Sport. This project can be found on the Sports Page of the Statesman's website. <http://www.sbstatesman.com/category/sports>

**Built a PhotoPlethysmograph for a Course Project (AVR)** – Programed an Embedded System (ATmega16A) using AVR assembly to build a device that senses heartbeats. This is a final course project for an Embedded Microprocessor System Design Class. The video of this can be found on my Instagram, which can be found on my personal website.

**Built Programs using Computer Vision/Machine Vision Algorithms in MATLAB (Course Project)** –

Varun built programs which performed Edge Detection, Hough Transforms, Rotation of 3 Dimensional Objects, Binary Imaging Analysis, and finally a 3D vision system as a final project.

**Construction of Wheel of Fortune using a GUI in Java (Course Project)-** Took a course under Professor Paul Fodor and created a Wheel of Fortune program using Java programming as well as a GUI using Java FX Scene Builder

**Won Best Design at Hackathon NYU-** Built a BlueTooth Device which transmitted data from the gyroscope inside an Iphone 5 to a moving ball on an LED Screen with two friends.

