

Anandh Somasundaram

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EDUCATION

CARNEGIE MELLON UNIVERSITY DEC 2015

MS-IT IN SOFTWARE ENGINEERING

SCHOOL OF COMPUTER SCIENCE | QPA : 3.8/4.0

AMRITA UNIVERSITY MAY 2012

BTECH IN INFORMATION TECHNOLOGY | CGPA : 7.1/10

ACADEMIC PROJECTS

VOSSM | CMU STUDIO PROJECT

May 2015 - Dec 2015 | Team Size - 3 | Role - Architect, Developer

- Researchers can meter their use of open source scientific software
- Designed the system architecture to satisfy **Extensibility**, **Data Reliability** and **Availability** quality attributes
- Developed plugins(**Python**) and UNIX daemons(**Shell**) to collect usage data from lab machine. A Server(**Python, Django**) to collect and crunch the usage data sent by the lab machines. A Dashboard(**HTML, JS, CSS**) to configure data aggregation and generate summary report

ROVER COMMANDER TOOL - FUNDED BY CMU RI AND NASA

Jul 2014 - Apr 2015 | Team Size - 4 | Role - Architect, Developer

- Enables scientists to generate and monitor the operations performed by an autonomous astrobiological robot, Zoe
- Designed the system architecture to satisfy **Modifiability** and **Usability** quality attributes. Followed **SCRUM** software development process
- Developed a web application using **Python**, **Django** and **MongoDB** stack

WEBSITE UPTIME MONITOR

Jun 2015 - Aug 2015 | <https://vimeo.com/135819736>

- Built the application using **MEAN stack**. **Node.js** tracks the website realtime and broadcasts the status of the website to all connected clients using **Socket.io**
- Generates graphs for the response time using **amCharts**. Alerts through email or SMS when the website goes down

CUSTOM LOAD BALANCER USING AMAZON AWS SDK

Oct 2015 - Oct 2015

- Designed and implemented custom load balancing algorithm for compute cluster on Amazon AWS to auto scale using **Amazon AWS Java SDK**
- Custom metric and rules for triggering scale-out and scale-in operations
- Monitor Instance Health, if unhealthy replace the failed instance, start a new one, redirect requests to new instance as well.

PERSONAL PROJECTS

BUFFET TRACKER SEPT 2015 | HARVARD HACKATHON | WINNER

- Tracks eating behavior at a buffet style restaurant. By tracking plates using RFID and linking them to a change in weight of a particular vessel.
- Sensor data is streamed to **RaspberryPI** in CSV format through **Arduino's** serial port, and in RaspPi we parse the data, convert it into JSON and persist it on **DynamoDB**

PANDA - SENTIMENT ANALYZER | HACKATHON

Mar 2014 | Team Size - 3 | Role - Designer, Developer

- Web application created using **Python** and **Flask**
- Does **sentiment analysis** on reviews fetched and classifies positive, negative and neutral. **Feature extraction** done for the product. Used **RabbitMQ** message broker to pass tweets to sentiment analyser

EXPERIENCE

INFOSYS LTD.

SYSTEMS ENGINEER

Jun 2012 - Jun 2014 | Chennai, India

- Configured Oracle Identity Manager 11g, Oracle Access Manager 11g for providing web security to a leading Japanese car manufacturer
- Secured and monitored close to 100 websites, web services, web applications and desktop applications using Oracle IDM tool

LINKS

GitHub: github.com/yesyayen

LinkedIn: [/in/anandhsomasundaram](https://in.linkedin.com/in/anandhsomasundaram)

Twitter: [@anandh_somu](https://twitter.com/anandh_somu)

Website: anandhsomu.com

SKILLS

LANGUAGES

Extensive: C++ • Java • Shell

Comfortable: Python • HTML •

Javascript - AJAX, JQuery

APP FRAMEWORK

Comfortable:

MEAN stack • Django • Bootstrap

TECHNOLOGY

Extensive: Git • Unix

COURSEWORK

GRADUATE

- Cloud Computing*
- Architectures for Software Systems
- Introduction to Computer Systems
- Managing Software Development
- Mobile Application Development for Android and iOS

HACKATHONS

HET, Harvard (Sept 2015)

- First Place!

ThoughtWorks, India (Oct 2013)

- Won Best App award

Save the Hacker, Freshdesk, India (Mar 2014)

InMobi Hackday, India (Oct 2014)

CERTIFICATIONS

Redhat Certified Engineer (RHCE)

May 2015 - Present

MongoDB 101 Jul 2014 - Apr 2015