Anandh Somasundaram

asomasun@andrew.cmu.edu | 412.425.4273

EDUCATION

CARNEGIE MELLON UNIVERSITY Dec 2015
MS-IT in Software Engineering
School of Computer Science | QPA : 3.81/4.0

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

TWITTER ANALYTICS RESTFUL WEB SERVICE
Oct 2015 - Dec 2015

- Restful web service for Twitter data analysis supporting different types of queries on 1TB dataset within a limited budget. Did ETL (extract, transform, load) on tweet data using **MapReduce** and stored them in **MySQL** and **HBase**
- Used Nodejs, Hadoop, HBase, MySQL, AWS(EMR, Elastic Load Balancing, ASG, EC2, S3)

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.

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

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**
Twitter: **@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