Sabari Girish Mahendran

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Work Experience

Amazon.com, Inc   **United States**
Software Development Engineer   *February 2018 - Present*

- Working for the S3 team of Amazon Web Services.
- Responsibilities include designing, implementation, testing and maintenance of software applications.

Amazon.com, Inc   **United States**
Software Development Engineer Intern   *August 2016 - December 2016*

- Worked for the Broadway team of Retail Financial Intelligence Systems group.
- Created an application to capture the usage metrics of the products developed by the team and to surface them in an user interface.
- Captured the usage details in the logs. Wrote scripts to copy the logs from host to AWS-S3, create connection to EMR using boto3 API and adds the hive script in the cluster. Wrote Hive scripts to generate the results in AWS-S3
- Emailed the results on daily basis to the subscribers.

Hewlett Packard   **India**
Business Intelligence   *August 2013 - July 2015*

- Worked for Business Intelligence team under Analytics and Data Management business unit.
- Created Web Intelligence reports for Vodafone using PL/SQL procedures and SAP Business Objects.
- Responsibilities included developing Business Intelligence Reports from initial requirement to design, implementation, testing and documentation under SDLC model.

Education

Rochester Institute of Technology   **Expected - December 2017**
Master of Science in Computer Science,   *GPA - 3.69/4*

Madras Institute of Technology, Anna University   **August 2009 - June 2013**
Bachelor of Technology,   *GPA 3.32/4*

Projects

- **Human in the loop active learning framework**
  Developed a framework to collect labels for data points and input them to the system that generates the machine learning model to classify the job related tweets. Mechanical Turk was embedded into Meteor application. The data in MongoDB is seeded to the system to generate better classification model.

- **Text mining and Classification of Tweets**
  Streamed tweets from Twitter using Twitter Streaming API. Performed text mining using NLTK-Natural Language Processing module. Classified the tweets based on their genres using Naive Bayes and Support Vector Machine.

- **US Airlines rating system using Twitter data**

  Performed text mining/sentiment analysis on tweets and classified the tweets as positive, negative or neutral feedback. Generated the validation data by streaming tweets from Twitter using Twitter Streaming API. The results are used to rate the airlines that helps customers to choose a airline with better service.

- **Routing Information Protocol**
  Implemented and simulated Routing Information Protocol version 2 using Distance Vector algorithm and route poisoning.

- **Spotify clone**
  Developed an clone of Spotify application using Cassandra python driver.

- **Developed middleware solution for heterogeneity in wearable devices**
  Designed and developed a software layer that masks the heterogeneity issue in wearable devices. In addition to that provided API standards for each wearable devices that is used to develop applications integrating wearable devices.

- **Medical Imaging using hybrid segmentation scheme**
  Reduced error rate in CA-diagnosis of Lung disorders using a hybrid segmentation scheme using Active Shape Regression model, Region of interest extraction and classification using Support Vector Machine. Achieved 8% reduction in error rate when compared to k-nearest neighbor classification.

Technical skills

- **Programming Languages:** Python, Java, C++, C, Shell scripting
- **Database:** Elastic Mapreduce Hive, S3, DynamoDB, Cassandra, H2, Oracle 10g, MYSQL
- **Industry Software Skills:** SAP Business Objects, Informatica
- **Operating System:** Linux, Windows, Mac OS

Courses

- Foundation of Computer Science theory
- Computational Problem Solving
- Foundations of Algorithms
- Advanced Object Oriented Programming and Design
- Advanced Programming Language in C++
- Foundations of Computer Networks
- Distributed Systems
- Foundations of Cryptography
- Database system Implementation
- Big Data Analytics
- Foundations of Intelligence Systems