Madhavi Latha Bodeddula

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EDUCATION:

Masters in Software Engineering **May 2017 – May 2019.**
Arizona State University, Tempe, Arizona, USA. **GPA: 3.33/4.00.**

Bachelor of Technology in Computer Science and Engineering **Aug 2013 - May 2017.**
Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, India. **GPA: 3.71/4.00.**

TECHNICAL SKILLS:

Languages **:** Python, SQL, Java, HTML, CSS.
Applications **:** AWS, Boto3, JIRA, Eclipse IDE, MySQL, Intellij, GitHub, Angular, Tableau, MATLAB.
Course Work **:** Artificial Intelligence, Software design, Software verification Validation and Testing, Advanced Data Structures and Algorithms, Semantic Web, Software Enterprise: Inception and Elaboration, Data Mining, Languages and Program Paradigms, software Enterprise: Project and Process Management, Data Base Management System, Web Technologies, OOP through JAVA.

OWN PROJECTS:

Knowledge in AWS. **May 2018.**

- Creating users, groups, roles, permissions, Multifactor Authentication using IAM service.
- Creating S3 buckets and storing objects and hosting a website using static-web hosting.
- Creating DynamoDB tables and configuring it. Using AWS Cli commands.
- Creating and transferring files between S3 and DynamoDB in Lambda using Boto3.
- Deploying applications using Elastic Beanstalk.
- Building a serverless website with Route53, API Gateway, Lambda, S3.
- Setting a code pipeline with code commit, code deploy, code build.

Cost and Usage Analysis: **July 2018.**

- AWS cost and usage report is stored in the s3 using the billing and cost management service.
- Data has been extracted from s3 transformed and loaded to Athena using python and pandas.
- Data has been queried and visualized in Quicksight applying appropriate filters and parameters.

ACADEMIC PROJECTS:

Dumb Charades – Gesture recognition using data mining: **March 2018 – April 2018.**

- In this project, we attempted to develop a computing system that can understand human gestures. Large data of 10 actions with each 20 repetitions of 47 teams is collected using four sensors which produced 18 data streams for each repetition.
- Data has been cleaned and an intuition is made for selecting the features to be implemented on the sensor values by looking at the patterns among the gestures using Tableau. In MATLAB raw data is transformed using feature extraction methods, normalized and Principle component analysis is implemented for dimensionality reduction, to see distinction among the actions.
- The top 4 features of the PCA are chosen and machine learning algorithms of Support vector machines, Decision trees and Neural networks are implemented. For each action the best machine is evaluated among other two for differentiating that action from others. For each action an average accuracy of 80% has been achieved.

Interpreter for a Programming Language **March 2018 – April 2018.**

- Designed and developed a custom language named GVM using Object Oriented Python
- GVM features – Strongly typed, code indentation, arithmetic operations, conditional statements and loops.
- Wrote context free grammar rules for the language and developed parser. Developed run time using operational semantics which interprets the parse tree generates output. **Technologies used:** Python, Pycharm, Antlr4, Github.

Easy Music: **Oct 2017 – Nov 2017.**

- Created a semantic web recommendation portal that suggests nearby concerts/events based on the user's favorite artists.
- When user logs on to Spotify account, API call is made to Spotify REST API to get user details in the form of JSON data and scripts are written in python to extract the necessary data.
- For every artist, SPARQL query is run to retrieve events belonging to that artist which are uploaded in Fuseki server, events are filtered based on user's location and user input radius.
- Events details such as name, description, location, its distance from the user and duration are displayed on the front-end.
- **Technologies used:** Python, Angular, Bootstrap, Spring Framework, Apache Tomcat, NodeJS, Protege, Google Refine, Apache Jena Fuseki, SPARQL, Git, Maven. **API's used:** Spotify, Ticket Master, Eventful and Google maps API's.

A Web Socket mapping the emotional face: **February 2018 – April 2018.**

- Implemented a web socket for a client server UI based on MVC architecture, where the client shows different face expressions and graphs of values of data sent from the server.
- The main aim of the projects was applying the Agile, scrum methodologies and implementing the concepts of Sprint cycles, Product backlogs and user stories. **Technologies Used:** JAVAFX, Intellij, Git, Taiga.