### **KEDAR PRABHU**

LinkedIn: https://www.linkedin.com/in/kprabhu31 Email: orewakedar@gmail.com Mobile: +1 (213) 448-0914

### **SUMMARY**

Love to invest time and software technology skills on creating a better tomorrow. Available for open job positions related to Software Engineer/Development. Have work authorization in USA (**H-1B** visa). Open to relocation.

### WORK EXPERIENCE [4+ years]

SONY Interactive Entertainment – PlayStation Network (San Francisco, CA)

[May, 2015 - Present]

Software Engineer I

- Followed Agile methodology extensively with scrum meetings every day and bi-weekly report submission.
- Designed and implemented web services in Spring Framework with J2EE, Enterprise Java beans (EJB),
   maven projects, NoSql databases (Cassandra, Redis) and document stores (SOLR), RESTful APIs with JSON.
- Major requirement was to develop web-based applications with designing and coding Java RESTful APIs.
- Created Sony internal tools in Python3 script to carry out load testing on these REST APIs.
- Performed Load Analysis and reports on the server impacts from the API calls made by using Python packages like pandas and matplotlib.
- Improved test coverages by creating all unit and integration tests in TestNg framework for all use cases.
- Used CQLSH, a command line interface, in order to make CQL queries in Cassandra and extract data and analyze it as a part of debugging process. Used Redis-CLI tool to query for data in Redis for the same.
- Relied on SonarQube tool to check tech-debt of the java code written in Maven project as well as for checking code coverage considering both unit and integration tests.
- Used Eclipse Cleanup and Formatter to increase the readability and maintainability of a Java code.
- Leveraged tools like JIRA for tracking implementation progress and bugs, Jenkins build systems to build the application on AWS servers, Git for version control and RAML docs for documentation of all REST APIs.

## The Interaction Lab, USC (Los Angeles, CA)

[May, 2014 - April, 2015]

Technical Analyst

- Aim was to identify features that impact the human-robot-interaction the most.
- Performed Feature Extraction with tool called 'Praat', Data Visualization with tools called Orange and R studio, and Statistical Analysis on raw data obtained with Scikit-learn and WEKA for machine learning.
- Used sentiment analysis, a Natural Language Processing algorithm, on text converted from human speech.
- Leveraged MySQL database to store and retrieve the relevant data for each person in project who interacted with Robots. The data included the normalized values of pitch and intensity of human voice, hand and eye gestures, the distance between the human-robot and the robot's corresponding response.
- Used Git as version control tool; Worked in Windows and Unix platform.
- Implemented Machine learning technique like Naïve Bayes to predict robot's responses.
- Concluded that the pitch and intensity of a human speech from the previous conversation matters the most, for the next conversation, of all the features being considered.

# TATA Consultancy Services Ltd. (Mumbai, India)

[Jun, 2012 – Nov, 2013]

Assistant System Engineer

- Followed Iterative methodology to work on creating applications using MySql database.
- Developed and maintained backend modules in Java/Python.
- Major tasks involved creating sub application to the existing ones. And maintaining them.
- Also worked on IBM's DB2 using Java (JDBC) and Python (PyDB2).

## **TECHNICAL SKILLS**

Programming Languages: Java (J2EE, Spark), Python, SQL/CQL, XML, R language, MATLAB, Praat

J2EE Technologies: REST, JSON, Spring4.0 framework, Spring Beans, Spring DAO, maven, TestNg framework

Data Analysis tools: R studio, Orange, WEKA, Python packages (pandas, matplotlib, sklearn, DB2, MySQLdb)

Databases:Cassandra, Redis, SOLR, Couchbase, MySql, DB2Other Tools:Git, AWS console, Jenkins, JIRA, SonarQube

### **EDUCATIONAL RECORD**

Master of Science in Computer Science, University of Southern California (USC), Los Angeles, CA Bachelor of Engineering in Electronics, B.V.Bhoomaraddi College of Engineering and Technology, India

#### **PROJECTS**

# Click-Through Rate Prediction (MATLAB, Java)

- Implemented Click-Through Rate (CTR) prediction using Machine Learning techniques with Big Data
- Blog: <a href="http://www.ctrpredicted.blogspot.com/">http://www.ctrpredicted.blogspot.com/</a>

## Emotion Detection based on Human Speech (Praat, Python, R, WEKA)

- Performed Feature Extraction and Feature Analysis on human speech data to classify the speaker's emotion
- Blog: <a href="http://emotiondetected.blogspot.com/">http://emotiondetected.blogspot.com/</a>

# Text Classification using Machine Learning Techniques (MATLAB, Python)

- Programmed Naïve Bayes classifier in MATLAB to classify emails based on SPAM/Not SPAM
- Scripted Naïve Bayes classifier in Python to perform Sentiment Analysis

### Geo Spatial operations (Java, Apache Spark, HDFS)

- Developed functions in Apache Spark for Geometry Union, Convex Hull, Nearest point, Farthest point, Spatial Range and Spatial Join Queries, which extends Apache spark operations to perform Geo Spatial operations.
- The input and output of the above are stored in HDFS.

# Mobile device game development (Unity3D, C#)

- Developed an Android/IOS mobile game using Unity3D tool
- YouTube video trailer: <a href="https://www.youtube.com/watch?v=rxUhIKzdESg">https://www.youtube.com/watch?v=rxUhIKzdESg</a>