

PRADEEP RAJA MOHAN

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EDUCATION

Illinois institute of technology – Master’s, Information Technology & Management (GPA: 3.8/4.0) Dec - 2017

Anna University, Chennai, India -Bachelor of Technology, Information Technology (CGPA: 8.1/10.0) May - 2015

TECHNICAL SKILLS

Programming Languages: JAVA, Python, C#

Big Data: MapReduce, SQOOP, Spark, Hive, Elastic Search,

ETL Tools: SSIS, Pentaho

Database Technologies: MySQL, MS-SQL, Oracle, Mongo DB, HBase

Web: HTML5, JavaScript, CSS3, NODE JS, Spring MVC, Hibernate, XML, JSON, RESTful API, ASP.net

AWS Cloud Services: EC2, Lambda, Dynamo Db, S3, Google Cloud services

Others: Machine Learning algorithms, MVC, JUNIT, SCRUM

EXPERIENCE

Application Developer Intern at Federal Home Loan Bank of Chicago (Chicago, IL) May 2017 - Aug 2017

- Created and Implemented a system application which involves automation of AWS instance - shutdown/restart by lambda function (Python) with a UI designed in MVC framework that lists features for all instances to customize work timings.
- Automated the detection and turning down AWS instances with less utilization, saved \$200k / Month to the organization.
- Designed scripts to write/read Instance tags, which is used as storage fields for instance work timings, instead of a data store.
- Implemented an ETL process in SSIS (SQL, C#) to estimate the customers pledged collateral values by pipelining from CUSIPS generation in staging tables to transferring data to pricing vendors (IHS, Bloomberg, IDC).
- Successful job creation, repository maintenance and troubleshooting performance issues of ETL pipeline is carried out.

Software Developer Intern at Metarvrse Technologies (Chennai, India) Mar 2015 - Dec 2015

- Created an application service pipeline that superimposes computer generated model on user’s view of real world from images.
- Developed REST API service that delivered backend AR/VR content (computer model) to the front-end streamer (user view) resulting in the development of an 'AR-VR REALITY' module.
- Involved in the entire life cycle from data collection, mining, filtering, migration, analysis and reporting.

PROJECTS

REAL-TIME DATA PIPELINE TO ANALYZE TAXI PRICE SURGE (Aug 2016)

<https://goo.gl/xaPZCW>

- Built a Real-Time Big Data Processing Pipeline using Kafka for data ingestion and Spark for analyzing surge behavior in price.
- Surge price is calculated by analyzing real-time price with already collected data based on locations and visualized using Tableau.
- Data scraping, and transformation was done on important fields to extract only the fields of interest using Spark.

WEB LOG ANALYSIS USING HADOOP AND ITS TOOLS (Jan 2017)

<https://goo.gl/gZLmpq>

- Created an analysis on Historical web log in Hadoop using MapReduce, SQOOP, HIVE and PIG.
- Imported data into MySQL and HDFS using SQOOP. Insights like most visited URL by each unique IP address, most occurred error code and its reason analysis and summarized the page content using MapReduce, HIVE and PIG.

SENTIMENT AND CLUSTER ANALYSIS THROUGH TWITTER API (Nov 2016)

<https://goo.gl/cDiy76>

- Developed a python application which identifies the twitter user who uses the current trending hash tags and builds a graph between them. Used Girvan Newman cluster analysis algorithm, clusters among them are identified.
- Tweets are classified using Machine learning models - SVM, Naïve based and logistic regression for predicting sentiment. Computed testing accuracy for each model using Cross validation.

PERSONAL MEDICAL TRACKING APPLICATION (Jan 2016)

<https://goo.gl/JRYYYV>

- Created an end to end product for family medical tracking using core Java in Object-Oriented Design and modeled database.
- Functionality to keep track of medicines of family members, doctors use the medical history of family & setting up appointments.
- Implemented CRUD functionalities following MVC design pattern for modeling user interface to its underlying data models.
- XML Parsers (DOM and SAX) are created to load the data from XML to MySQL Database.

BIO-METRIC BASED AUTHENTICATION IN ATM (Jan 2015)

<https://goo.gl/bo5GYK>

- Implemented a highly-secured ATM application using Iris image of individual user to authenticate transactions securely.
- Digital image processing algorithms like canny edge detection and Hough’s circle detection algorithm for parsing the iris image for authentication with the use of Public Key Infrastructure (PKI), MD5 hashing for client and server-side validations.

CERTIFICATIONS

Hadoop certification FITA Services | **EMC² Certified Academic Associate, Cloud Infrastructure and Service.** | **Microsoft**

Certified Solution Associate | **ITIL v3 Foundation** certificate on IT Service Management. | **Oracle Certified Java SE6 Developer**

PUBLICATION

- Published paper titled “Secure Banking Based on Machine Learning in IRIS Pattern Recognition” in IJCTA. **ISSN: 0974-5572**
- Presented and published paper titled “Identifying and Optimizing Data Duplication by Efficient Memory allocation in Repository by Single Instance Storage” in IRAJ. **ISBN: 978-93-85465-30-7**