Padmanabhan Vijendran

Big Data Developer / Data Engineer

https://amazingpaddy.github.io/

Profile

- IT professional with 12 years of experience in developing applications using Java, Python and Big-Data technologies
- Extensive expertise in working with Hadoop, Spark 3.x, Spark Structured Streaming, Kafka, Hive and
- Strong knowledge of **Python** programming and **Machine learning** concepts
- Proficient in UNIX commands and shell scripting
- Excellent analytical, communication and monitoring skills
- Adaptable to different technologies and eager to learn new concepts quickly

Professional Experience

Senior BigData Developer, Cognizant Technology Solutions - Client: Ford **Project Details**: Ford engineers use reports generated by an **ETL** framework to design future cars with low manufacturing costs. We are migrating the ETL framework from **Sqoop** and **Hive** to **Apache Spark Structured Streaming** so that engineers can access near **real-time** reports.

08/2021 - present Mississauga, Canada

Roles and Responsibilities:

- Migrated ETL framework from Sqoop/Hive to Apache Spark Structured Streaming for Ford Engineering.
- Developed Spark Structured Streaming application using pyspark that reduced data processing time by 50% and increased report accuracy by 20%.
- Implemented ETL pipelines using Apache Spark, Kafka and MongoDB that enabled engineers to utilize near real-time reports for designing future cars at low manufacturing cost.
- Designed and developed **Java** application to efficiently fetch data from LDAP
- Refactored **Java** applications to improve readability and performance
- Explored new technologies using **POCs** and documented the approaches to implement new project requirements

Senior BigData Developer, Kelly Services - Client: Credit Agricole CIB Project Details: CMT (Cash Management Transactions): Implemented an internal payment engine that handled incoming and outgoing transactions efficiently using Java 8, Spark structured streaming, Kafka, HBase and ELK stack. Delivered the project following Agile methodology.

03/2018 - 07/2021 Singapore

Roles and Responsibilities:

- Implemented an internal payment engine using Java 8 and Spark structured **streaming** that processed over 1 million transactions per day.
- Developed an integration layer using Spark structured streaming and Java 8 that enabled seamless communication between the payment engine and other applications

- Designed and built a data pipeline using Kafka, HBase and Spark that ingested, stored and analyzed transaction data in real-time
- Created **Python** scripts to automate demo tool and performance report generation, reducing manual effort by 50%
- Created custom source and sink connectors for IBM MQ using Spark structured streaming that improved data reliability and throughput
- Developed **Jenkins** pipelines using **groovy** and **shell scripting** that facilitated continuous integration and delivery of code changes
- Automated functional testing using Cucumber framework that ensured highquality code delivery
- Set up application logs using **ELK** stack and created dashboards for monitoring performance metrics

Big Data Developer, Cognizant Technology Solutions - Client: Ford **Project Details:** I worked on the project that generated reports to help Ford

Engineer to design a future cars at low manufacturing cost. We implemented **ETL**using **BigData** tools such as **Apache Spark 2.3**, **Hive, Sqoop** and **Oozie.**

02/2016 – 11/2017 Chennai, India

Roles and Responsibilities:

- Extracted data from various Oracle databases to HDFS and Hive using Sqoop scripts
- Transformed data to the required schema using **Hive** scripts
- Developed Java application to generate Excel reports from Hive table data using Apache POI
- Explored ETL with Alteryx, Apache Spark using POCs
- Automated manual tasks using Python and shell scripts

IT Analyst, *Tata Consultancy Services - Client: Target, USA*Project Details: I worked on the project that processed product images and details for Target website using ETL Java application and SQL scripts.

01/2011 – 01/2016 Chennai, India

Roles and Responsibilities:

- Developed ETL Java application to process product information using Map-Reduce
- Wrote **SQL** scripts to transform product related data
- Automated manual tasks using Python
- Investigated and analyzed application support incidents through to root cause and fix
- Proactively monitored services and responded to alerts raised by customers and monitoring systems, ensuring the availability and performance of the Teamsite Content Management Systems

Skills

Programming Languages JAVA EE Frameworks Java, Python Spring MVC, Spring Data, Spring Security **BigData Tools Databases** Apache Spark, Kafka, Hive SQL, MongoDB, HBase **Machine Learning** Cloud Probability and Statistics, Linear Algebra, EDA, AWS, Azure, GCP Pandas, Numpy, Pytorch, KNN, Naive Byes **DevOps Automation Scripts** Docker, Kubernetes, Jenkins, Tekton pipelines Shell, Batch, Powershell, Selinium **Other Tools** Intellij, Eclipse, Git, Gitlab, Putty, ServiceNow, **Testing Frameworks** Junit, Cucumber Rally.

Certificates

• AWS Cloud Practioner ☑

 Microsoft Certified: Azure Al Fundamentals ☑

Projects

Telegram BOT to Interact with ChatGPT, Personal Projects

I developed a telegram BOT ☑ to interact with chatgpt using Python 3.11 and OpenAI chatgpt API that supports models - text-davinci-003, gpt-3.5-turbo, gpt-4

Courses

GCP Data Engineering, Google Qwik-Labs □