Kuriakose Mathew

55 Beinn Aoibhinn,
Letterkenny,
Co. Donegal,
F92RW10

+353-894337123
mail.kuriakosemathew@gmail.com
linkedin.com/in/mathew5
github.com/mathew55
kuriakosemathew.com

- Working as a Big Data & ML Engineer at Tata Consultancy Services, UK & Ireland. Worked exclusively for Prudential Financial, the largest insurance provider in the United States with $1.7 trillion in total assets under management.
- Hands-on Experience working on end-to-end Data Science projects and working with various Big Data and Machine Learning Technologies - Spark, Kafka, Solr, HDFS, XgBoost, Explainable AI framework - LIME and on relevant AWS services like EMR, S3, Athena etc
- Excellent leadership skills demonstrated while working as a Campus Representative for Entrepreneurship Cell, Indian Institute of Technology, Kanpur

PROFESSIONAL EXPERIENCE

Tata Consultancy Services *(Previously, Pramerica Systems)*, Letterkenny, Ireland — June, 2019 - Present
Machine Learning Engineer

- Work with a 12 member team of Data Scientist, Engineers in enabling business to develop a *Predictive Insurance Underwriting Engine* using ensembled machine learning models.
- Sole developer responsible for maintenance and enhancements of Prudential.com Search.

Temenos, Bangalore, India — Oct, 2017 - Aug, 2018
Software Engineer

- Worked as part of the core product development team of Temenos T24 focusing on the development of Retail Banking Software Suite.

EDUCATION

Athlone Institute of Technology, Ireland — May, 2019
Master of Science in Software Engineering — *Grade – 1.1*

- *Full Scholarship Recipient* based on partnership agreement *between Athlone Institute of Technology & RSET, Mahatma Gandhi University,* India.

RSET, Mahatma Gandhi University, India — June, 2017
Bachelor of Technology in Computer Science & Engineering — *Grade – 1.1*

- *Campus Ambassador, Entrepreneurship Cell, IIT – Kanpur*
- *Member of Computer Society of India*

SKILLS

- **Programming Languages:** Java, Scala, Python & Shell
- **Big Data & Distributed Ecosystem:** Spark, HDFS, Kafka, Solr
- **AWS Services:** EMR, S3, Athena
- **Tools:** Git, Jenkins, Maven, Docker, Splunk, Jira
- **Others:** Sql, XgBoost, Spark MLlib, RESTful Development, Microservices

PROJECTS

- **Risk Assessment Mortality Model (RAMM) Predictive Insurance Underwriting**
  RAMM is a machine learning project predicting underwriting risk of life insurance applicants who are within 18 - 60 years old and seeking individual life insurance between 100k – 3million dollars. RAMM predicts the need for medical exam and other medical records and provides instant approval of insurance for applicants in good category.
    - Operationalized and maintained ML models and business rules for RAMM handling transactions worth millions of dollars.
    - Refactored the entire data infrastructure code using software engineering best practices and led the migration of On-prem data worth 100s of GB into AWS. Currently the sole owner of data infrastructure code used by Data Science and Reporting team.
    - Developed framework to support complex nested json in the project while maintaining the real time processing of applications. Also, added support for nested json dummy data creation in test framework and improved the overall design of the framework.
    - Designed & developed an orchestration microservice which connects to the source system over Kafka and communicates with various ML models over http.
    - Led the team in a PI meeting in absence of team lead and took ownership in communicating with various stakeholders and breaking the requirements for a quarter into tasks and assigning it to resources and releases.

- **Enhancement of Search Engine Capability of Prudential.com**
  The search on Prudential.com and other related websites are powered by Solr and APIs are written in Java.
    - Migrated search indexing of Prudential.com from Apache Nutch to Custom Web Crawler, giving better control and visibility over the documents indexed into Solr.
    - Worked with business in improving the overall search experience.
    - Developed APIs for n-gram type-ahead search of US college names.

- **Decentralized Marketplace using Ethereum and IPFS (Academic)**
  The Decentralized marketplace is an application built on top of the Ethereum & Interplanetary File System (IPFS) to create a new decentralized, peer-to-peer platform that aims to bring together buyers and sellers under one umbrella.
    - Developed a front-end part for the buyers and sellers which can talk to the Ethereum blockchain and use smart contract functionality to add to cart and buy the products.
    - Developed code for IPFS file storage support to the system to store all the metadata which is otherwise expensive to store on the blockchain.
    - Developed an escrow functionality to handle disputes between the buyer and the seller. The funds when buying a product will be first placed in escrow until the buyer and seller come into an agreement.
    - Developed a bridge server for filtering and categorizing of the products which enhances the overall user experience of the system.

CERTIFICATIONS

- Machine Learning by Andrew Ng, Coursera

REFERENCES

Available on Request