

# Rohit Kumar

Big Data and Data Science Practitioner

#### **Address**

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### **Programming**

Java ★★★★☆
Scala ★★★☆☆
R ★★☆☆
Python ★★☆☆

#### **Databases**

MySQL ★★★★
MS SQL ★★☆☆
Oracle ★★☆☆☆
Coherence

# **Big Data Systems**

Spark
Hadoop
Flink
Kafka
NoSQL

★★★★☆☆

★★☆☆☆

★★☆☆☆☆

# **Experience**

Aug. 14 - now

#### **Big Data Scientist (Freelance)**

Upwork

Worked on multiple short and long term projects for multiple clients on big data and data science domain.

- Disperse.io: Worked on analyzing and discovering trends in Wi-Fi data for London metro stations. Worked as data engineer in data cleaning and data analysis using Spark-SQL.
- Discovergy: Worked on smart meter applications. Developed a machine learning based platform on top of Spark streaming to collect, store and analysis data from smart meters.
- L3Networks: Designed and implemented a processing system that could process web logs arriving at the rate of 46GB/min in real-time. Designed the architecture and the data processing pipeline using Apache Kafka, Apache Spark and Apache Hadoop using Java and Scala Languages. The work included deployment of these technologies as well.
- DigitalVidya: Designed and delivered online course on Big Data Engineering course (Hadoop, Spark, Hive, Pig, Cassandra, NoSQL) for DigitalVidya for 3 batches of 10 students. Currently delivering a course on Data Science with Python (NumPy, Pandas, scikit-learn) and R.

Jun. 14 - Jul. 14

#### **Software Designer**

Royal bank of Scotland, Delhi, India

Developed data pipelines for the massive amount of banking and trading data for RBS using in-memory database on Oracle Coherence.

Apr. 11 - May. 14

#### **Assistant Consultant**

Tata Consultancy Services, Mumbai, India

Technical team lead and Scrum Master for the entire online assessment platform, an online cloud based system for conducting online examinations and certifications. As technical lead I was responsible for 10 different products on the assessment platform and was supervising a team of 30 developers.

I was the lead architect and developer for the deployment of the complete rco-system of the online assessment platform in multi-tenant architecture for software as a service model. I also contributed as technical expert in pre sales and helped in designing new product offerings for the education domain.

Technologies used: J2EE, Java, MySQL, SVN, Struts 2, Hibernate, Memcached, Adobe Flex

Mar. 11 - Sep. 11 Researcher

#### Tata Research Development and Design Center, Pune, India

Worked on data privacy and data security. Worked on data masking techniques for privacy preserving data mining.

Technologies used: C++, CVS

### Languages

English ★★★★★
Hindi ★★★★★
Spanish ★☆☆☆☆

### **Personal Skills**



Nov. 07 - Mar. 11 Assistant System Engineer

Tata Consultancy Services, Chennai, India

Lead architect to develop and deploy the online assessment platform for TCS hiring throughout India. Performance and Security Lead for the online assessment platform. Taught Algorithms and Java to new employees as a part of learning and development program.

Technologies used: Java, CVS, Haskel, Java Security library, MS SQL.

Jun. 05 - Jun. 07 Summer Research Intern

JNCSAR, IISC, Bangalore, India

Did two summer(2 months) and one winter(1 month) research internship in Nanoscience. Worked with P.hD students on analyzing nano material properties under electron microscopes.

# **Education**

Aug. 14 - Now Ph.D Candidate Université Libre de Bruxelles & Universitat Politécnica de Catalunya

Doing PhD from ULB on Graph Stream mining and distributed processing.

Aug. 08 - Apr. 11 M.Sc in Computer Science

Chennai Mathematical Institute, India

The Master course was done part time while working in TCS. Main subjects: Discreet Mathematics, Database Systems, Operating systems, Data mining, Cryptography, Statistics, Design and Analysis of Algorithm, Theory of Computation, Programming language Concepts. Grade: **8.44**%

Thesis: Security aspects of online Assessment platform-Touchstone.

Jul. 04 - Jul. 07 B.Sc (Hons) in Physics

Hindu College, Delhi University

Did summer research internship at IISC Bangalore every summer break. Co-Organized Physics Department fest on 2006. Percentage: **76.1%** 

# **Awards and Achievements**

Apr. 13 Best Technical Lead Award in ACTion2013 in SMB iON

Awarded best technical lead in the entire department of 500 developers and 25 teams.

Sep. 11 Innovation of the year award southern region Tata Innovista

Tata group yearly award for innovations across the Tata groups companies.

# **Publications**

2017 Activity-Driven Influence Maximization in Social Networks ECML/PKDD

Rohit Kumar, Muhammad Aamir Saleem, Toon Calders, Xike Xie and Torben

Bach Pedersen

2017 Cost Model for Pregel on GraphX ADBIS

Rohit Kumar, Alberto Abello, and Toon Calders

2017 Information Propagation in Interaction Networks. EDBT

Rohit Kumar and Toon Calders

2017	<b>Location Influence in Location-based Social Networks.</b> Muhammad Aamir Saleem, <b>Rohit Kumar</b> , Toon Calders, Xike Xie and Torben Bach Pedersen
2017	Finding simple temporal cycles in an interaction network.  Rohit Kumar and Toon Calders  TD-LSG
2017	IMaxer: A Unified System for evaluating Influence Maximization Mechanisms in Location-based Social Networks  CIKM Muhammad Aamir Saleem, Rohit Kumar, Toon Calders, Xike Xie and Torben Bach Pedersen
2017	Cost Model Based Approach for Graph Partitioning in Spark GraphX DBDBD Rohit Kumar, Alberto Abello, and Toon Calders
2015	Maintaining sliding-window neighborhood profiles in interaction networks.  ECML/PKDD Rohit Kumar, Toon Calders, Aristides Gionis, and Nikolaj Tatti.

# **Patents**

2009	System and method for automated competency ass Raman Srinivasan, Priyadharshini Sridhar, Swarna Srini Radhika Jayapaul, Radhika Ganesan, Amit Nath, Vikas	vasan, <b>Rohit Kumar</b> ,
2013	Customized question paper generation Viral Prakash SHAH, Nawaz Shaikh, Rohit Kumar	US20130084554A1
2014	Secured Computer Based Assessment Viral Prakash SHAH, Nawaz Shaikh, Rohit Kumar	US20140186812A1

Rohit Kumar March 22, 2018