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SUMMARY

7+ years of Data and Distributed Systems backend engineering experience.

EDUCATION

- **Illinois Institute of Technology, Chicago** *Aug 2014 – May 2017*
  M.S., Computer Science.
  - Data-Intensive Computing, Data Mining, Distributed Real-Time Systems, Advanced Database Organization
  - **Projects –** IPC Using Message Queues in Minix, Custom Minix Shell, Relational Database System Prototype
- **VIT College of Engineering, Pune, India** *June 2007 – May 2011*
  Bachelor of Engineering, Computer Science
  - **Projects –** DTMF controlled land rover, FAT32 file system simulator, Machine Descriptor Generator for GCC

TECHNICAL SKILLS

Languages:	Java, Scala, GoLang, Python, C, C#, Bash, SQL, Gremlin, GraphQL
BigData Stack:	Hadoop, Spark, Sqoop, Mahout
Messaging and RPC:	gRPC, Apache Thrift, RabbitMQ, Kinesis, SQS, Akka.io, Avro, Protobuf
Databases:	DynamoDB, Neo4J, Neptune, dGraph, Hive, S3, Cassandra, MySQL, Redis, ODBC Engineering
Tools/OS:	AWS, Terraform, CircleCI, Ansible, Git, SVN, UNIX, Windows, Azure Cloud Services

PUBLICATIONS

- Whitepaper, 'Hadoop Distributions – A Detailed Comparative Study' in collaboration with Flux7 Labs Inc.
- Technical Blog at https://etushar89.wordpress.com

RESEARCH EXPERIENCE

MRPlus: Hadoop compatible MapReduce framework optimized for Intel® Xeon Phi™

- Designed and developed a Hadoop compatible MapReduce framework optimized to leverage the processing power of **Multi Core Architecture** of Intel® Xeon Phi™ Co-processors.
- Main challenge was the efficient communication and large data transfer between Java based Hadoop and C based MRPlus framework executing on these co-processors.

PROFESSIONAL EXPERIENCE

MEDIAMATH **NYC/Chicago, USA**
Software Engineer III *Summer 2016 - Present*

- Played key role in building MediaMath's next generation **Identity** graph stack for cross device, household and CTV ad targeting. I work closely with product and engineering directors to understand business needs and drive development of various services under Identity. I am responsible building core Identity graph, making it available to internal services. Making sure it is privacy framework, such as GDPR, OptOut, compliant. These services are horizontally scalable and can process ~ 3B devices per day. This new architecture has resulted in reaching **~100M** more consumers, bringing in **~3M**/mo in revenue.

FREELANCE DATA ENGINEER **Pune, India - 2015**

- E-Commerce Recommendation system: Built a custom collaborative filtering algorithm, and implemented it using Spark. This enabled the platform to provide shopping recommendations to consumers.
- Gnome Sequencing using Hadoop: Implemented a gnome sequencing algorithm using Hadoop MapReduce. This enabled us to horizontally scale otherwise very compute expensive sequencing process.

PERSISTENT SYSTEMS **Pune, India**
Module Lead *2011 – 2014*

- These projects include:
  1. *Apache Hive ODBC Driver*
     Ported driver to Windows, developed and maintained ODBC APIs, secured database connection with TLS technologies tuned driver to improve performance by **35%** in case of import data scenarios.
  2. *Sqoop Connectors for MS-SQL Server and MS-PDW*
     Ported Apache Sqoop to Windows, evaluated different approaches and modified Sqoop core to support MS-SQL Server and MS-PDW.
  3. *Hadoop distribution optimized for **Intel® Xeon Processors** and **Cray® Supercomputers***
     Modified Apache Hadoop to report additional performance metrics, ported Hadoop to commercial Cray Supercomputer developed an upgrade tool to streamline upgrade process without losing data.
  4. *Online media streaming service.*
     Implemented Event Orchestration Layer (which was backbone of the service). It allowed very high throughput message passing throughout the system. Developed Apache Spark based module to generate Movie and TV Title recommendations for users.

ACHIEVEMENTS

- Was awarded "You Made a Difference" and "Star Performer" by Persistent Systems multiple times for excellent performance in each project.
- 'Introduction to Digital Marketing', 'Programmatic 101' certification by New Marketing Institute.