Piyush Mishra

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EDUCATION

Georgia Insititute of Technology Atlanta, USA
Master of Science in Computer Science; GPA: 3.9/4.0 *2024*
Delhi Technological University Delhi, India
Bachelor of Technology in Electronics and Communication; GPA: 8.1/10.0 *2015*

EXPERIENCE

Media.net Bangalore, India
Senior Lead Software Development Engineer *July 2022 - Present*
- Developed Open Backend (OBE) components to handle shopping and booking transactions for Hotel IT & Rail web services distribution platform.

Goibibo & MakeMyTrip Bangalore, India
Lead Software Engineer & Senior Software Engineer II *October 2019 - July 2022*
- Leading the backend team to build and maintain a scalable platform for hoteliers with a B2B application which powers the Hotels and Homestays to millions of customers on both MakeMyTrip & Goibibo.
- Developed microservices & functionalities such as Images & Video, Amenities, Policy & House rules, Services & Notices, How to reach property, Surveys, User Generated Content (Review, Rating, Replies) for the above application.
- Developed features such as Property Onboarding/Listing, Property Layout Modeling, Import listing from other channels such as Airbnb, etc. for the MakeMyTrip homestay mobile application.
- Developed a full-stack web application using Django, DRF, MongoDB, MySQL, and Docker for the moderation of Images & Videos.
- Developed a finite state machine for the state management of on-boarded hotel & homestay properties. The data is persisted in MySQL and subsequently pushed to ElasticSearch for indexing and Kafka for client consumption.
- Developed the architecture to support the integration of multi-vendor content (Synxis, Derbysoft, OYO & Amazon) to power hotel content.
- Optimizing application performance metrics such as **response time, latency, and throughput** by optimizing the application code and database queries through various APM metrics targeting the SLA of 99.99% availability

Amadeus Labs Bangalore, India & Nice, France
Senior Software Engineer & Software Engineer *July 2015 - October 2019*
- Developed Open Backend (OBE) components to handle shopping and booking transactions for Hotel IT & Rail web services distribution platform.
- Developed web application, REST API & python library for managing passenger record data (PNR).
- Built a python library integrating the centralized data logging service for the pushing, fetching, and parsing of logs.

PROJECTS

Multi-threaded file transfer server with caching | *C, pthreads*

Distributed File System | *C++14, gRPC, and Protocol Buffers.*
- Designed and implemented a distributed file system (DFS) with a weakly consistent synchronization system to manage cache consistency between multiple clients and a single server.

Virtual CPU Scheduler and memory coordinator | *C, KVM, libvirt*
- Implemented a hypervisor CPU scheduler and memory manager using libvirt API.

MapReduce implementation using gRPC | *C++14, gRPC, and Protocol Buffers.*
- Implemented a threadpool of workers, partitioning the input data, scheduling the program's execution across a set of workers, handling worker failures, and using gRPC for master-worker communication.

Technical Skills

Languages:	Python, Java, Scala, C, C++, SQL, Shell script
Technologies:	Django, Django Rest Framework (DRF), Spring Boot, MySQL, MongoDB
	Redis, Aerospike, ElasticSearch, Celery, Protobuf, gRPC, OpenMP, Open MPI
	Hadoop, Apache Spark, Apache Kafka, Kafka Connect, Hbase, Hive, HDFS, Zookeeper, Druid
Others:	Git, Docker, AWS, GCP, Jenkins, Grafana, Sumologic, Scalyr, NewRelic

Awards & Recognition

Recognized and awarded best performer six times at work.

Scored top 0.2% among 1.2 million aspirants in IIT JEE and AIEEE 2011 examinations.