

Dixit Keshavbhai Patel

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<https://www.linkedin.com/in/dixitk13> | <https://github.com/dixitk13/readmes.md>

Software Engineer

Education

Northeastern University, Boston, MA
Master of Science in Computer Science

Sept '14 – July '16
GPA: 4.0

University of Mumbai, Mumbai, India
Bachelor of Engineering - Computer Engineering

Aug '07 - May '11

Technical Knowledge

Programming Languages: Java, PL/SQL, JRuby, R, C/C++, Scala, Racket (Scheme)

Scripting languages: Python, Bash/Shell Scripting, Perl

Databases: Oracle, MySQL, Amazon S3, HDFS, Elasticsearch, MongoDB

Frameworks: MapReduce (Hadoop), EMR, Apache Spark, Zookeeper, Hibernate

Web Technologies: HTML5, jQuery, JavaScript, D3.js, Node.js, AngularJS, CSS3, JSON, REST, AJAX

Version Control: Git (GitHub/GitLab), CVS, SVN, Perforce

Misc Tools: Maven, SBT, Confluence, JIRA, Anaconda

Work Experience

Software Engineer, Cisco, San Jose, CA

Sept '16 – Present

- Working on CAFY-Web, a Flask application, which uses technologies like Web Components, MySQL and MongoDB.

Java Development Intern, Genesys, Burlington, MA

May '15 – Dec '15

- Designed a scalable data architecture using Open-source software viz. Log-courier, Logstash, Elasticsearch & Kibana (ELK) with searchers, masters, data-nodes and indexers, currently ingesting 11,000 events per second.
- The resultant is a centralized tracking dashboard to be used by developers which allows tracing errors quickly and helps trace process flows with UID/GUID's for a CX application.
- Customized Logstash filters in Ruby (JRuby), Perl scripts & Java indexing modules to ingest synthesized data.

Senior Systems Engineer, Infosys Ltd., Pune, India

Sept '11- Aug '14

- Application Developer for a J2EE application titled “VPN automation”, which is triggered via E-mail and automates whole VPN order processing till the step of provisioning, following a factory design pattern using Hibernate for connecting to databases. Developed multiple flows for VPN automation and Web Services in JAX-WS & REST.
- Reduced redundancy in code and number of database connections by implementing a Generic Database Service in Hibernate using JAX-WS framework and Java Reflections.
- Automation of error codes for Local Number Portability (LNP) in BPM, Java and JPA.
- Spearheaded the migration of Web Services and Web Applications from Tomcat 6.0 to Weblogic 12c.
- Proposed and implemented connection pooling via c3p0 for Hibernate and database indexing.

Academic Projects

Parallel Data Processing Framework (Java, EC2, S3): Designed & developed own Map-Reduce framework in Java, which runs on AWS EC2 with S3 as storage and locally.

Data Science & Big Data Analytics (EMR, S3, Java, Hadoop, R): Analysed Airline on-time performance datasets to predict Missed Connections, Delayed Flights, Routing Details, etc. by building models using Elastic MapReduce & Hadoop.

Fault tolerant DMTCP (Zookeeper, C++): Integrated Zookeeper (C++ binding) in DMTCP (Distributed MultiThreaded Checkpointing) to store metadata and make a fault tolerant master-worker architecture.

Social Network Analysis (D3.js, Java): Solved the puzzle of the most influential people in the social network in Enron dataset. Implemented algorithms such as Betweenness centrality, Closeness centrality, Floyd-Warshall and Degree centrality on a 16k graph in Java. Visualized the social network using D3.js.

Time Series Analysis (Elasticsearch, Python, R): Forecasted busyness of a business on Yelp dataset where number of reviews is a feature, using Elasticsearch as NoSQL Database, pandas and numpy library and R.

Visualize (MEAN Stack): Developed a single page application which does visualization using AngularJS, D3.js, Node.js and MongoDB for a use-case of job applications and applicants.