K A M A L   P A T H A K   kamalpathak10@gmail.com
Pune - India   Mb. No. **+91 9922377599**

PROFILE IN BRIEF

Total 13+ years of experience in S/W development in Java and other open source tools & technologies like, Apache Spark, Hadoop, Solr, Lucene, Nutch etc. Working experience on various clouds AWS/AZURE/OpenStack - Private Cloud**.** Prior Experience in developing & deploying Linguistic/NLP software and solutions. I have experience of driving a project right from its inception to a successful end.

EXPERIENCE DETAILS

COMPANY   : ATOS Global Pvt. Ltd. Pune - India
DEPARTMENT   : Business Technology and Innovation Centre
DURATION   : May 2014 – Till Date
DESIGNATION   : Technical Architect
ROLE   : I'm part of team, that is responsible for Big data and data analytics platform. I lead the team to design and develop the platform, orchestrate the deployment across various public and private clouds. My responsibility includes, leading technical team, design & architect solutions on various public & Private clouds. Build solutions using cloud native services. Assisting team's in responding to customer RFI's & RFP's. I have worked on IoT projects for various clients. I'm also responsible for performing various POC's on IoT & big data.

COMPANY   : C-DAC Research & Development Center, Pune - India
DURATION   : October 2005 – May 2014
DESIGNATION   : Senior Technical Officer
ROLE   : As part of Search Engine team, I lead the team to design and develop distributed search platform. My responsibility includes, design & develop comprehensive, resilient, distributed, highly available and scalable Search engine platform using open source tools & technologies. Provide relevant search on structured and un-structured data. Design and built modules for enabling Indian language search. Provide search as a service on thousands of government websites. I have worked with various government departments like ECI, "Patent & IPR division", NIC, IRCTC, RECs IIIT & IITs. I've contributed in winning a project of ₹ 250 million from Election commission of India. I was also involved in writing project proposals and various client demos.

TECHNICAL SKILLS

Programming Languages	Java, J2EE (Servlets, JSP, Spring MVC), Java Script, HTML/CSS
Web Related	Bootstrap, Highcharts, XML, AJAX, Tomcat Web container, RESTful Web Services
Databases	HBase, MongoDB, My SQL, PostgreSQL, MongoDB, MS SQL Server
Cloud/Bigdata	AWS, Azure, OpenStack, Azure HDInsight, Azure ML Studio, Hortonworks Data Platform, Apache Hadoop, Sqoop, Hive, Apache Spark, Solr, Lucene, Nutch, RabbitMQ, Docker, Kubernetes
Source Safe & Others	Stash, GitHub, Bit Bucket, Jira, Jenkins, Confluence, Crucible

EDUCATION

Name of Exam.	Year of Passing	Board/University	Grade/Percentage
M.S (Software systems)	2011	BITS, Pilani	8.1(CGPA)
PG Diploma (DAC)	2005	C-DAC	B+
B.E. (Information Technology)	2003	RGPV, Bhopal (M.P)	70.56

AWARDS/GROWTH PATH

- ❖ Best team award for year 2007.
- ❖ Designated as "Project Leader" in year 2008.
- ❖ Best team award for the project "Patent Analysis & Management System" & project "Localization Project Management System" for year 2010.
- ❖ Designated as "Team coordinator" in year 2010.
- ❖ Best team award for project "Government of India Search Engine" for year 2012.
- ❖ Best performer award for year 2012.
- ❖ Designated as Technical Architect in 2016.

CERTIFICATION/WORKSHOP/INDEPENDENT COURSE WORK

- ❖ "AWS Certified Solutions Architect Associate" online course from Udemy.
- ❖ "Big Data Analytics with HDInsight" from Microsoft Virtual Academy
- ❖ "Hadoop Essentials" from MAPR Academy - HDE 100
- ❖ "HBase Data Model and Architecture" from MAPR Academy - DEV 320
- ❖ "Hands on workshop on "Hadoop (Admin)" Organized by "Computer Society of India", Mumbai Chapter in December 2012.
- ❖ "MongoDB for Developers" from MongoDB University - M101P
- ❖ "MongoDB for DBAs" from MongoDB University - M102
- ❖ Winter school on "Information Retrieval" conducted by "Information Retrieval Society of India (IRSI)"at "Indian Statistical Institute", Bangalore in December 2011.
- ❖ Certification course on "Patent Landscape Analysis" conducted by "Global Institute of Intellectual Property", Delhi in September 2009.

NATIONAL & INTERNATIONAL CONFERENCES

- ❖ Participated as speaker in "16th Annual LRC Internationalisation & Localisation Conference" at Limerick, Ireland in September 2011.
- ❖ Participated as speaker in "AGIS 2010" at New Delhi in December 2010
- ❖ Organized International conference on "ICT-IPR Trends and Challenges in Globalized World" at New Delhi in April 2011.
- ❖ Participated in "Global WordNet Conference" at IIT Bombay in January 2010.

PERSONAL INFORMATION

Date of Birth	April 10, 1981	Sex	Male
Marital Status	Married	Languages Known	English & Hindi
Present Address	Sr. No 44, Flat No. C-506, Sky Heights, Undri-Pisoli Road, NIBM Annex , Pune	Permanent Address	S/O K.C Pathak Sadbhawana Vihar, Peeli Kothi, Bari Mukhani, Haldwani Nainital, Uttrakhand - 263139
Email	Kamalpathak10@gmail.com	Contact No.	+91 9922377599

REFER SECTION "*PROJECT PROFILE*" FOR PROJECT UNDERTAKEN

PROJECT PROFILE

Project 1: **"Demand Forecasting & Wind Turbine Power Prediction & Predictive Maintenance"**

Technologies: Azure Data Factory, Azure HDInsight Spark, Azure Machine Learning Studio, Power BI, Azure Event Hub, Azure Stream Analytics, Hortonworks Data Platform

Duration: **Jan 2018 – Till Date**

Responsibilities:

- ❖ Designed batch and real-time data ingestion pipelines using Azure cloud native services.
- ❖ Designed Spark data transformation job.
- ❖ Achieved reduction in data ingestion time by ¼ of the original time by configuring right number of partitions, executors, executor core and re-partitioning of data in Apache Spark.
- ❖ Configured optimal partitions and scaling units for Azure Event hub and Azure Cosmos DB to maximize the throughput.
- ❖ Developed multi-threaded java utility as event generator simulator for sending events to Azure Event hub.

Project 2: **"Atos Codex – A Data Analytic Platform on Cloud"**

Technologies: Hortonworks Data Platform(HDP), Jupyterhub, RStudio, DSW, AWS/AZURE/Openstack

Duration: **Jan 2016 – Dec 2017**

Responsibilities:

- ❖ Worked as technical lead for this project.
- ❖ Blueprinting various components using Java & Shell Script.
- ❖ Orchestration of deployment on various clouds using Apache Brooklyn based tool.
- ❖ Reduced client's AWS monthly infra bill from 6,500$ to 3,000$ by hardening security group rules and optimizing ec2 instances types.
- ❖ Simplified Java code to remove complexities by code re-factoring and added support for various clouds deployments.
- ❖ Containerization of different components of Codex stack using Docker and management using Kubernetes.

Project 3: **"Internet of Things (IoT) - Connected Machines"**

Technologies: Java, RabbitMQ, HBase, Spring MVC, Spring data template, Spring REST services, Html5, Bootstrap, High charts

Duration: **May 2014 – Dec 2015**

Responsibilities:

- ❖ Developed multi-thread Java socket server to listen for events on TCP socket.
- ❖ Capturing data from sensors & performed ETL operation on data.
- ❖ Written Spring MVC based rest services for data storage and data retrieval from database.
- ❖ Design and development of a web based responsive user interface using Bootstrap & HTML5.
- ❖ Designed and developed static and dynamic real-time charts using Highcharts.
- ❖ Setup of Distributed HBase cluster as historical datastore.

Project 4: **"Voter Information Search for Election Commission of India"**

Technologies: Solr Cloud, Java/J2EE, Keepalived, HAProxy.

Duration: **Jan 2014 – May 2014**

Responsibilities:

- ❖ Worked as Technical lead & coordinator among different teams for this project.
- ❖ Design & Developed a distributed, highly available search service using Solr Cloud.
- ❖ Achieved end-to-end response time of 2-3 second for a user query, by configuring appropriate number of Solr shards and memory of systems.
- ❖ Enabled and implemented geo-spatial search to get the information of nearest pooling booth.
- ❖ 800 million records of voter's data exported from various state level RDBMS and Imported into Solr index in a short span of time.
- ❖ Live system can be accessed by the URL http://electoralsearch.in

Project 5: **"Government of India (GoI) Search Engine"**

Technologies: Apache Nutch, Lucene, Solr, Hadoop, Stanford NER, JAVA, RESTful Services, VN, Bugzilla, HAProxy.

Duration: **March 2011 – December 2013**

Responsibilities:

- ❖ Writing Project Proposal, Requirement analysis, Design & Development.
- ❖ Worked as team-coordinator & single point of contact for client and different teams.
- ❖ Designed and developed modules for Indian language search. Support for languages like Hindi, Marathi, Gujarati and Urdu were enabled.
- ❖ Implemented NER based faceted search.
- ❖ Language detection using N-gram analysis and other Linguistic inputs.
- ❖ A distributed cluster of Nutch (which has in-built support of Hadoop) was implemented for crawling of government of India websites.
- ❖ A distributed Solr index is used by front-end application to search the web.
- ❖ Language identification, lemmatizer, stemmer, spell-checker, cross language search & various NLP modules were designed, developed and integrated in the search platform.
- ❖ Contributed in improving the relevance of search by enabling various dictionaries, Ontologies & rule-based approaches.
- ❖ Contributed in designing test strategies for recall and relevancy of the search results.