

ARUNKUMAR RAJAPPAN

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Skilled Computer Science Graduate, with 5 years of professional experience in software development, seeking full time job.

PROFESSIONAL EXPERIENCE

Big Data Application Developer at EcoMotto, USA [Apache Spark, Kafka, Scala, Java, Android, Spring MVC, MongoDB, NodeJS] Jan 2015 – Present

- Read Sensor data i.e. thermostat readings and perform real time data analytics using Apache Spark & Hadoop hosted on Google Cloud. Developing a web portal for different vendors and home owners to managing/controlling home appliances, with other additional features
- Developing a web portal for an Energy company, to catalog/manage different products/services provided by them in USA

Senior Software Developer at Infosys Ltd., India

Jul 2008 – Jul 2013

Byte Project [Adobe CQ5, HTML, CSS3, Java]

Jan 2013 – Jul 2013

- Developed a Web Content Management project from scratch using Adobe CQ5 and OSGI framework. Had learned required open source tools and helped/guided other team members with the project implementation

Customer Portal [Java, JQuery, HTML, CSS3, SOAP]

Mar 2012 – Dec 2012

- Developed a customer web portal using HTML and JQuery for front end design along with the integration with Tibco CIM through Tibco ESB services (SOAP). Performed requirement analysis, self-learning of the new technology and knowledge transfer to team members

Government Pricing System [Java, Cocoon framework, Oracle, JBOSS, DataStage, Shell Scripting]

Jan 2011 – Feb 2012

- Technology refresh, wherein existing system was to be migrated from JBOSS 3.0.1 to JBOSS EAP 5.0.1 and from Oracle 9i to Oracle 11g. Modified existing Java code, Oracle objects, did performance tuning (for both java and oracle functions) and interface changes (Batch and DataStage Interfaces/jobs). Performed various development (major/minor enhancements) and support activities

eMarta and Legal Data Warehouse [Java, Informatica, SQL Server, Oracle]

Nov 2008 – Dec 2010

- Requirement gathering, migrated existing functionalities consisting of complex record generation and updation logic, from existing java application to Informatica workflows. Carried out monthly releases consisting of various major/minor enhancements and bug fix activities

Software Developer at Envale Systems Pvt Ltd. [C#, Java, Matlab]

Jan 2008 – Jun 2008

- Researched and developed an OCR for Devanagari manuscripts (both written and handwritten) using fuzzy logic. Developed a module using Image Processing algorithms to recognize special characteristics to identify a character uniquely

EDUCATION

Master of Science in Computer Science University of Texas at Dallas, USA Graduating in Fall 2015

Bachelor in Information Technology Dharmsinh Desai University, Nadiad, India May 2008

Graduate Coursework - Machine Learning, Natural Language Processing, Big Data Analytics, Probabilistic Graphical Models, Cloud Computing, Artificial Intelligence, Statistics in Data Science, Video Analytics, Design and Analysis of Algorithms, Computer Graphics, Network Security

ACADEMIC PROJECTS

- **VM Placement and Scaling [Current]** - Currently developing an application to dynamically scale and migrate VMs for dynamic resource allocation based on the classified clusters for different workloads.
- **Medical Diagnostic System [Fall 2014]** - Created an OWL ontology (knowledge base) for diseases and symptoms and given a set of symptoms as input did A* search to detect the disease.
- **Anomaly Detection [Fall 2014]** - Built a network intrusion detector by building a predictive model to determine between a bad and good connections using Spark and K-means algorithm from Spark MLlib.
- **Secure E-commerce System [Fall 2014]** - Created an encrypted and secure communication channel between customer, broker and a web store (using Diffie-Hellman key exchange, public-private key and RSA encryption), for secure authentication and transactions.
- **Structure Learning for Bayesian networks [Spring 2014]** - Compared structure learning algorithms for Bayesian networks, using “bnlearn” library in R, on various data sets (provided in bnlearn) in terms of quality of estimation, sensitivity of the size of the data set, classification performance, etc.
- **Intelligent Building System (IoT) [Spring 2014]** - Developed an android application for intelligent reception desk, which will process and verify visitor's identity and meeting details and for indoor building navigation system using Bluetooth positioning. Implementation involves integration and utilization of different cloud services (SaaS) for Google Calendar & Voice API, face recognition and OCR APIs. Developed an Indoor navigation map for tracking visitor's position using Bluetooth proximity and android sensors (i.e. Compass, gyroscope, accelerometer and step counter)
- **Sentiment Analysis [Fall 2013]** - Developed a program to implement and compare different NLP algorithms (Naïve Bayes, Maximum Entropy and SVM) using WEKA and LibSVM library, for detecting the polarity of the given statement, using different feature(s) combinations like unigram, bigram, n-gram and POS tags.
- **3D Object Recognition [Fall 2013]** - Developed a program using LibSVM library, to recognize 3D objects using Support vector machine algorithm

TECHNICAL SKILLS

Languages: Java, Python, Scala, C/C++, PL/SQL, Shell Scripting, C#, HTML, CSS3, JQuery, XML/XSLT

Databases: Oracle, SQL Server, Teradata, Cassandra, MongoDB

Tools & Frameworks: Apache Spark, Apache Hadoop, WEKA, R, Pig, Hive, Apache Kafka, Apache Mesos, Spring MVC, Android SDK, OpenCV, Informatica, DataStage, Toad, Adobe CQ5, Apache Tomcat, JBOSS, Esper (CEP), Twitter Bootstrap, J2EE, Cocoon Framework, Protégé, Apache Jena

OTHER ACTIVITIES AND AWARDS

- Participated in a Hackathon event conducted by DFW EXCELLERATOR. Developed an application to automate visitor's appointment verification and assist him/her in indoor navigation using iBeacon, NFC, BLE and Android SDK.
- Awarded with Most Valuable Player award for “Customer Portal” project (Nov 2012)
- Developed an audio and video broadcasting, receiving and recording system using Java Media Framework and Real Time Protocol
- Co-ordinated Communiqué 2007, Dharmsinh Desai University's National Level Technical Symposium
- Created a robot for Robo Rumble & Race for Communiqué 2006 (DDU, India) and Prevoyance 2006 (Nirma University, India)