KARTHIK LAKSHMI NARAYANA SARMA

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OBJECTIVE

To build a successful career in an organization that provides challenging environment and opportunities to grow professionally.

EDUCATION

Arizona State University, Tempe, AZ, U.S.A.   2015 Jan - 2016 Dec
Master of Computer Science (MCS). Overall GPA 3.5

University of Kerala, Trivandrum, Kerala, India.   2009 Jul - 2013 Aug
Bachelor of Technology (B.Tech) in Computer Science and Engineering. Overall GPA of 3.5.

EXPERIENCE

Graduate Software Engineer – Orion Health, Scottsdale, Arizona   2017 Jan – Present
  ➢ **Business Intelligence & Analytics**
- Front end development using React, ES6, Webpack, Redux, Javascript
- Backend development using J2EE, JAX-RS, OSGI plugin development.
- Analytics using Apache Spark big data framework
- Visualization using D3 visualization library.

Application, Demo and Development Intern – Alcatel, San Diego, California   2016 May – 2016 Aug
- Developed REST'ful services in Go lang for an application in the IoT domain.
- Managed distributed cluster and helped production release via Docker image.
- **Proficient in application production and deployment using Apache Mesosphere, Apache Marathon and Docker machine.**
- Developed skills in Linux virtualization using QEMU, KVM, libvirt.
- Used Amazon Web Services (AWS) / Elastic Cloud Compute (EC2).

Software Engineer (C++) – QuEST Global (erstwhile NeST Software), Trivandrum, India   2013 Oct – 2014 Nov
  ➢ **Toshiba Medical Systems Corporation (PIMS Application Development & Support)**
- Contributed software engineering expertise in the development of PIMS (Patient Information Management System) through all phases of software lifecycle, from requirements definition through successful deployment.
- Provided user requirements analysis, design and programming support for enhancement of PIMS application.
- Assisted many senior developers in creating quick fixes to bugs for the software workflow process.
- Developed troubleshooting skills through log analysis and built hands-on experience in implementing design patterns.

PROGRAMMING SKILLS

- *Programming Languages* – Core Java, J2EE, Go lang, SQL, C, C++, HTML, CSS, React
- *MVC Frameworks* **-** Spring MVC, JAX-RS, ExpressJS, Gorilla
- *Familiar IDE's* – IntelliJ, Eclipse, Sublime, Visual studio, PyCharm, Vi, Atom
- *Big-Data & Cloud Technologies* - Apache Spark, Apache Mesos, Apache Marathon, Docker, Hadoop MapReduce

PROJECTS

➢ **SCALING GEO-SPATIAL OPERATIONS IN DISTRIBUTED PLATFORM - APACHE SPARK**   2015 Jan - 2015 May
- Geospatial operations simplified through distribution over cloud.
- Deployment in a cluster managed by 1 master and 3 slave nodes.
- Data Coordinate storage in Hadoop HDFS.
- Application developed in Java using spark libraries and geospatial operations implemented using JTS topological library.

➢ **MODELING DISCOURSE CENTRIC DATA (Java, JSP)**   2015 Jan - 2015 May
- A personalized support application to improve the learning experience of users by modeling data from learning
- Forums. (Algorithm used - Topic Facet Modeling)
- Automatically detects conceptual topics from short amounts of texts present on posts (taken from stack overflow dataset).
- Uses D3 visualization to show analysis results & finds whether a post is valuable or not.

➢ **SECURE BANKING SYSTEM (Java - Spring Framework)**   2015 Aug - 2015 Dec
- User account and transaction management through the Internet.
- Public Key Infrastructure (PKI) implementation for secure banking transactions.
- Secured through OTP and allows multiple transactions to occur concurrently.

➢ **WIKI-GENERATOR (Express JS, Mongo DB, Node JS)**   2016 Jan – 2016 Apr
- An application for generating a wiki out of chat messages.
- Allows users to chat on numerous topics and show statistics for identifying quality information based on topics.
- Users can tag when sending a chat message and like other valuable messages. The like count is used for generating statistics.
- Wiki generation based on contents receiving likes greater than a threshold and wiki categorization based on tagging.

COURSES

- Foundations of Algorithms
- Software Security
- Data Mining
- Distributed Database Systems
- Semantic Web Mining
- Technologies for online learning
- Distributed Software Development
- Software Analysis and Design
- Applied Cryptography