

# 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.

Jan 6, 2015 - Dec 12, 2016

Master of Computer Science (MCS). Overall GPA 3.5

University of Kerala, Trivandrum, Kerala, India.

July 9, 2009 - May 7, 2013

Bachelor of Technology (B.Tech) in Computer Science and Engineering. Overall GPA of 3.5.

## EXPERIENCE

Junior Software Engineer – [Orion Health](#), Scottsdale, Arizona

Dec 21st, 2017 – Present

### ➤ Business Intelligence & Analytics

- Enhancing medical analytics platform developed using Apache Spark Streaming, Scala and Java 8, elasticsearch
- Real time streaming for healthcare analytics.

Graduate Software Engineer – [Orion Health](#), Scottsdale, Arizona

Jan 9<sup>th</sup>, 2017 – Dec 21st, 2017

### ➤ Business Intelligence & Analytics

- Contributed to a medical analytics platform developed using Apache Spark, Scala and Java 8, elasticsearch
- API development using Java 8, J2EE, JAX-RS, REST services
- Front end user interface development using React, ES6, Webpack, Redux, Javascript

Application, Demo and Development Intern – [Alcatel](#), San Diego, California

May 23, 2016 – Aug 16, 2016

### ➤ Microservices and cloud platform

- 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](#), Trivandrum, India

Oct 9, 2013 – Nov 10, 2014

### ➤ 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, C#, Node JS, R, Python
- **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 COMPUTATIONAL GEOMETRY IN DISTRIBUTED PLATFORM - APACHE SPARK

2015 Jan - 2015 May

- Computational geometry 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 spatial geometry 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.

### ➤ 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 | • Distributed Database Systems     | • Distributed Software Development |
| • Software Security         | • Semantic Web Mining              | • Software Analysis and Design     |
| • Data Mining               | • Technologies for online learning | • Applied Cryptography             |