

# Ronn George Jacob

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## EDUCATION:

**Northeastern University**, Boston, MA

**Khoury College of Computer Sciences**

Candidate for a Master of Science in Computer Science

Related Courses: Programming Design Paradigms, AI, Web Development, MapReduce, Information Retrieval

GPA: 3.93

August 2018 – Present

**Expected graduation: December 2020**

**National Institute of Technology Calicut**, Kerala, India

Bachelor's Degree in Computer Science & Engineering

Related Courses: Advanced Computer Networks, Database Management Systems, Data Structures, Algorithms, Data Mining.

May 2016

## TECHNICAL KNOWLEDGE:

**Languages:** Java, Go, Python, C#, C++, Scala

**Database:** SQL Server, MySQL, SQLite, MongoDB, JPA, PostgreSQL, DynamoDB

**Web:** JavaScript, HTML5, CSS3, PHP, Bootstrap, ReactJS, Express, Node.js, Spring Boot, REST

**DevOps/Others Tools:** Docker, Kubernetes, Git, Tensorflow, Hadoop, Elasticsearch, Maven, AWS EMR, S3, Spark

## WORK EXPERIENCE:

**Philips**, Andover, USA

Systems Engineering Co-op

June 2019 - December 2019

- Simplified root cause analysis for performance dips for build deployments on Azure by implementing solutions using C#, .NET, ReactJS for distributed patient monitoring host system performance testing.
- Increased workflow efficiency by 30% by developing scalable and fault tolerant solutions using C#, MySQL and Python for efficient automated registration of patient monitoring systems to server as trusted clients.

**Northeastern University**, Boston, USA

Graduate Teaching Assistant

January 2019 – April 2019

Teaching Assistant for CS3700: Networks and Distributed Systems.

- Held office hours for students to assist with for topics that included LAN, routing, congestion control, DNS, network security, distributed key-value stores, P2P, CDNs and topics that focus on principals of distributed systems.
- Assisted students with programming and implementing the above concepts in assignments and projects.

**Philips**, Bangalore, India

Software Engineer

June 2016 - July 2018

- Implemented POCs involving RDP for remote viewing of PACS applications with active communication across Computed Tomography team reaching target a quarter early.
- Upgraded features in image acquisition related modules using C#, .NET and Python fixing many defects, regression tests and received recognition award for taking ownership.
- Collaborated with 2 developers for implementation of reliable design for speech enabled medical application using NLP and AWS for healthcare hackathon resolving security loopholes and reduced risk factors count by 30%.

## PROJECTS:

### Information Retrieval Systems

- Developed custom indexer, retrieval and evaluation system for large scale information retrieval using Python for increased precision on retrieval models such as Okapi BM25, TF-IDF and vector space cosine similarity algorithms using Python, Elasticsearch, and Kibana.

### PageRank using MapReduce and Spark

- Implemented the PageRank algorithm in Hadoop MapReduce framework and Spark using RDD APIs, in order to parallelize computations of ranks, and deployed onto AWS EMR cluster.

### What's Cooking – A website for all your recipes

- Designed and implemented Full Stack application using React, Mongoose, Express and Node.js (MERN), allowing users to register for, and add/search for recipes with RESTful web services/APIs depending on user role.

### Portfolio Manager

- Designed and implemented a portfolio management system using Java for clients to invest in stocks with given strategies or custom user strategy, using various creational design patterns like Factory, Singleton & Builder pattern.