

KARTHIK KUMAR

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EDUCATION

Georgia Tech

M.S. Computer Science (OMSCS)
Machine Learning | Artificial
Intelligence

Virginia Tech

B.S. Computer Science, Honors
Minor in Mathematics
Summa Cum Laude

LANGUAGES

Java
Go
Scala
Python
SQL
Javascript
Ruby
C

FRAMEWORKS

MySQL | MongoDB
Elasticsearch | Lucene
HBase | ZooKeeper
RabbitMQ
Spring | Play | Rails | ReactJS
Maven | SBT | Make
K8S | Docker | Mesos | Marathon
GCP | AWS

WORK

LightStep - Software Engineer

SEPT 2018 - PRESENT | SAN FRANCISCO, CA

- Developed a method to visualize system architectures as a nodes & edges diagram with data derived from distributed traces
- Built an aggregate distributed trace analysis feature to enable complex queries over large scale distributed trace data
- Developed a correlations engine which automatically identifies system attributes that are more strongly associated with high latency
- Successfully migrated a core internal monolith into a distributed leader-worker architecture that was more performant, scalable and maintainable

Rally Health - Technical Team Lead | Senior Software Engineer

JAN 2016 - SEPT 2018 | WASHINGTON D.C. & SAN FRANCISCO, CA

- Led a team of six engineers building various enhancements and bug fixes for Rally Health's Engage product. Worked with QA, PMs and other stakeholders to deliver the team's objectives
- Member of Eng. Tech Staff, serving as a technical leader on many engineering-wide initiatives
- Led a crack team of engineers across the company to find and fix performance bottlenecks and scale up applications to meet an influx of new users on 1/1/2018
- Migrated a legacy, monolithic application into several scalable, independently deployable services. These microservices had lower latency, higher test coverage and better error handling
- Architected and implemented a system for translating strings on-demand based on a user's locale, using an external translations provider. The system is currently in use by several teams across different products
- Built a system to recommend activities based on a user's health goals. The system aggregated data from many sources and provided a list of activities, ranked by their relevance to the user
- Refactored a widely-used, critical user profile system that managed login and registration

Opower - Software Engineer

JUNE 2013 - DEC 2015 | ARLINGTON, VA

- Developed a batch data integration platform for ingesting utility data from over 100+ clients
- Worked on tools to visualize ETL and import validation process
- Created internal and external RESTful services for various business needs

Qualcomm - Software Engineering Intern

MAY 2012 - AUG 2012 | SAN DIEGO, CA

IBM - Software Engineering Intern

MAY 2011 - DEC 2011 | DURHAM, NC