



## SUMMARY

Senior software engineer with specializations in embedded systems, data science, cloud computing, and machine learning; and wide-ranging experience in small, mid-sized, and large companies. Striving for MBA to make an impact on increasingly dynamic world by infusing engineering expertise with business savvy.



## EXPERIENCE

### Senior Software Engineer (Team Lead)

04/2018 - Present

Amazon - Alexa AI Engineering

- Promoted from SDE II.
- Pioneered a batching/clustering approach to Alexa Engine data mining and modeling, improving accuracy by 40% and saved \$40 million per year.
- Launched rapid development and deployment platform to streamline new customer onboarding time from 2 weeks to 15 minutes.
- Managed team's operational excellence by establishing coding standards, fine-tuning metrics and alarms, identifying security gaps, and slashing average weekly issue count from 40 to 10.
- Mentored half of team and fostered their advancement from entry-level to associate engineers. Also actively engaged in Amazon's Mentorship and Leadership Development Program.
- Reengineered Alexa app's new user registration process, reducing Christmas peak customer issues by factor of 10.
- Published hardware requirements for Prime Day, Black Friday, and Christmas 2018 - 2020.

### Senior Data Engineer

11/2016 - 03/2018

Susquehanna International Group (SIG)

- Promoted from Financial Engineer.
- Established real-time hardware asset tracking and distribution system to mitigate inter-team coordination issues via efficient automated scaling.
- Developed real-time reporting mechanism on firm's market-making transactions to ensure FINRA compliance.

### Software Engineer

03/2015 - 10/2016

Microsoft - Operating Systems Group

- Established Windows Phone 10 Mail app's power consumption targets; achieved 4x reduction from Windows Phone 8 Mail app's levels.
- Advised management on Windows Mail App through reporting and analysis of user feedback and telemetry (e.g., recommended default auto-sync time of 15 minutes).

### Software Engineering Intern

05/2014 - 08/2014

Amazon Web Services (AWS) - Elastic Block Store

- Synthesized 6 teams' logging systems into single common logger, achieving 15% speed-up and halving debugging/troubleshooting time.

### Full-Stack Web Developer Intern

12/2013 - 02/2014

LeanFM Technologies, LLC

- Assisted startup launch seeking to leverage big-data analytics and Internet-of-Things for smarter, more efficient building management.
- Designed administrative interface to view sensor data and trigger adjustive actions.
- Identified best cloud computing solutions for managing data flow among components.

### Web Applications Course Developer and Assistant

05/2013 - 12/2014

Carnegie Mellon University

- Collaborated with professors to redesign the course from the ground-up.
- Created course administration platform for project submissions and evaluations.
- Directed 105+ students' projects by specifying requirements, tracking progress, and evaluating the final solutions.



## PROJECTS

#### Drone-Megaddon

Programmed drone fleet management app.

#### Hand-2048

Enhanced 2048! to respond to hand motions.

#### MyStockEx

Created custom stock exchange AI.

#### Tweet Miner

Mined 200GB within \$50 budget.

#### MedHub

Authored medical issue crowd-sourcing app.

#### Synonyms Crawler

Built web crawler to generate synonyms, perform sentiment analysis.

#### Real-Time Linux Kernel

Constructed real-time embedded Linux operating system.

#### Accenture 2014

Analyzed 2014 ACN stock, recommended buy.

# Sairam Krishnan

Engineering Solutions Architect

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## EDUCATION

### MS in Electrical and Computer Engineering

Carnegie Mellon University  
08/2014 - 12/2014

### BS in Electrical and Computer Engineering

Carnegie Mellon University  
2010 - 2014

### Minor in Business Administration

Carnegie Mellon University  
2010 - 2014

## LANGUAGES

English (Native)  
Tamil (Native)  
Spanish (Professional)  
Mandarin Chinese (Intermediate)  
French (Beginner)  
Italian (Beginner)  
Sanskrit (Beginner)

## SKILLS

Accounting (Financial and Managerial)  
Cloud Computing (Certified for AWS, Azure, and Google Cloud)  
Embedded Systems  
Machine Learning  
Software Development (Agile, Waterfall, Pair-Programming)  
Software Security (Amazon Security Certifier)  
Collaboration and Teamwork  
Time-Management

## ADDITIONAL ACTIVITIES

CMU Alumni Association (Volunteer)  
Amazon Leadership Development and Mentoring Program (Member)  
Amazon's Connect@Seattle Club (Volunteer)  
Amazon Security/Privacy Certifier and Operations Samurai  
Amazon SDE Bootcamp Trainer  
Microsoft Maker Club (Volunteer)  
SIG 5K Race for Funding Inner-City Schools (Volunteer)  
Toastmasters International (Member)  
Avid Numismatist  
Amateur Historian  
Personal Portfolio Manager (~\$500K in stocks/options/mutual-funds)