



## SUMMARY

Senior software engineer whose love of learning and potent blend of engineering (*data science, cloud computing, cyberphysical systems, artificial intelligence, and machine learning*), business, finance, and communication skills has powered successful leadership at companies like Amazon and Microsoft.

Striving for MBA to broaden horizons and maximize impact on the world by synthesizing engineering and business expertise with leadership, management, and networking skills.



## EXPERIENCE

### Senior Software Engineer (Team Lead)

04/2018 - Present

Amazon - Alexa AI Engineering

- Promoted from Software Development Engineer II within a year (top 1% performer).
- Handpicked to lead Alexa Engine team within 3 months of joining.
- Pioneered batching/clustering approach to Alexa Engine data mining/modeling, *improving accuracy by 40% and saving \$40 million per year*.
- Launched rapid development/deployment platform to streamline new customer onboarding time from 2 weeks to 15 minutes.
- Managed team's operational excellence by establishing coding standards, refining metrics and alarms, identifying security gaps, and slashing average weekly issue count from 40 to 10.
- Mentored team of 10 and fostered their advancement from entry-level engineers.
- Reengineered Alexa app's user registration flow, cutting Christmas peak customer issues by 10x.
- Published hardware requirements for Prime Day, Black Friday, and Christmas 2018 and 2019.

### Senior Data Engineer

11/2016 - 03/2018

Susquehanna International Group (SIG), Options Trading Division

- Promoted from Financial Engineer in Options Trading Division with 6 months.
- Established real-time hardware asset tracking and distribution system to mitigate inter-team coordination issues via efficient automated scaling, which eliminated 25% excess hardware and saved \$5 million.
- Developed real-time reporting mechanism on firm's market-making transactions to ensure FINRA compliance, curtailing monthly violations rate from 48% to 3%.
- Programmed innovative trading strategy optimizations AI to boost traders' performance by 7%.

### Software Engineer

03/2015 - 10/2016

Microsoft - Operating Systems Group

- Established Windows Phone 10 Mail app's power consumption targets and achieved 4x reduction from Windows Phone 8 Mail app's levels.
- Analyzed telemetry and user feedback to hone Windows Mail App (e.g., configured default auto-sync time to 15 minutes).
- Evaluated data storage and analytics solutions for telemetry and onboarded onto Microsoft Azure Databricks, which made it possible to generate weekly service health reports.
- Constructed Cortana's sentiment analysis engine to offer word suggestions for emails/documents and to glean real-time insights on Cortana's overall accuracy.
- Resolved guest network WiFi issues on Windows 10 early preview.

### Software Engineering Intern

05/2014 - 08/2014

Amazon Web Services (AWS) - Elastic Block Store

Combined 6 teams' logging systems into single common logger, achieving 15% speed-up and halving debugging/troubleshooting time from 6 hours to 3 hours.

### Full-Stack Web Developer Intern

12/2013 - 02/2014

LeanFM Technologies, LLC

Leveraged big-data analytics and Internet-of-Things for smarter, leaner building management.

### Web Applications Course Developer and Assistant

05/2013 - 12/2014

Carnegie Mellon University

Redesigned course with professors and coached 105+ students.

# Sairam Krishnan

Scholar and Business-Minded Engineer

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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 & Tamil (Native)

Spanish (Professional)

Mandarin Chinese (Intermediate)

French & Italian & Sanskrit (Beginner)

## SKILLS

Accounting (Financial and Managerial)

Cloud Computing (Certified for AWS, Azure, and Google Cloud)

Embedded Systems (Drones)

Artificial Intelligence and Machine Learning

Software Development (Agile, Waterfall, Pair-Programming)

Software Security (Amazon Security Certifier)

Teamwork and Time-Management

## ADDITIONAL ACTIVITIES

CMU Alumni Association (Volunteer)

Amazon Leadership Development Program (Mentor, SDE Bootcamp Trainer)

Amazon Bar-Raiser (Security/Privacy Certifier, Operations Samurai)

Amazon Connect@Seattle Club (Volunteer)

Microsoft Maker Club (Volunteer)

SIG Inner-City School Mentors (Volunteer)

Toastmasters International (Member)

Personal Portfolio Manager (~\$500K assets)

Passionate Student (LinkedIn Learning, Coursera, and Udemy Certifications)

Avid Numismatist and Historian