

Senior software engineer with specializations in embedded systems, data science, cloud computing, and machine learning; and wide-ranging experience in small (LeanFM Technologies), mid-sized (Susquehanna International Group), and large (Microsoft, Amazon) companies. Striving for MBA in order to make an impact on increasingly dynamic world by complementing engineering expertise with business savvy.



Senior Software Engineer

04/2018 - Present

Amazon - Alexa Al Engineering

- Led optimization of Alexa app's new user registration process, which reduced Christmas peak customer issues by factor of 10.
- Pioneered a smarter, batching/clustering approach to data mining and modeling within Alexa Engine, which improved accuracy by 40% and saved \$40 million per year.
- Oversaw creation of platform for rapid development and deployment within Alexa Engine, which reduced new customer onboarding time from 2 weeks to 15 minutes.
- Managed current team's operational excellence by establishing coding standards, fine-tuning metrics and alarms, identifying security gaps, and slashing average weekly issue count (initially peaked at 40 but now 10).
- Computed hardware requirements for peaks (Prime Day, Black Friday, etc.) and pushed management for extra hardware as needed.
- Mentored half of current team and fostered their advancement from entry-level to to associate engineers. Also actively engaged in Amazon's Mentorship and Leadership Development Program.

Senior Data Engineer

11/2016 - 03/2018

Susquehanna International Group (SIG)

- Proposed and implemented real-time hardware asset tracking and distribution system, which significantly mitigated inter-team coordination issues and instituted truly automated, efficient scaling for the first time.
- Drove development of real-time reporting mechanism on firm's market-making transactions, particularly focusing on compliance with FINRA rules.

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.
- Guided management through reporting and analysis of user feedback and telemetry. E.g., pushed for starting default
 Auto-Sync time of 15 minutes based on average time between manual syncs within Mail app on Windows 8 and
 Windows 10 Insider Builds.

Software Engineering Intern

05/2014 - 08/2014

Amazon Web Services (AWS) - Elastic Block Store

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

Full-Stack Web Developer Intern

12/2013 - 02/2014

LeanFM Technologies, LLC

- Helped launch startup seeking to leverage big-data analytics and Internet-of-Things for smarter, more efficient building management.
- Designed administrative interface to view sensor data and send commands to controllers to trigger adjustive actions.
- Determined and adopted best cloud computing solutions for managing data flow between sensors, controllers, and the administrative interface.

Web Applications Course Developer and Assistant

05/2013 - 12/2014

Carnegie Mellon University

- Collaborated with professors to redesign the course from the ground-up (exploring newer technologies, introducing more practical exercises and demos, etc.).
- Created course management and administration platform for project submissions and evaluations.
- Directed 105+ students' projects as Agile Product Owner by specifying requirements, tracking progress, and evaluating the final solutions.



Drone-Megaddon
Developed drone fleet
management app.

Hand-2048 Extended the 2048! game to support playing via hand motions. My Stock Exchange
Created stock exchange
app with bot AI, stock
recommendations, and
price projections.

Tweet Miner
Mine 200GB of tweets
for insights within \$50
budget.

Sairam Krishnan

Software Development Engineer, Aspiring Tech Consultant

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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

AE LANGUAGES

English (Native)

Tamil (Native)

Spanish (Professional)

French (Intermediate)

Italian (Beginner)

Mandarin Chinese (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)

Microsoft Maker Club (Volunteer)

SIG 5K Race for Funding Inner-City Schools (Volunteer)

Toastmasters International (Member)

AWS and Alexa Evangelist

Amazon Security/Privacy Certifier and Operations Samurai

Avid Numismatist

Amateur Historian