

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**

Amazon - Alexa Al Engineering

04/2018 - Present

- 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.
- Introduced and implemented a plaform for rapid development and deployment to streamline Alexa Engine's 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 (initially peaked at 40 but now 10).
- Mentored half of team and fostered their advancement from entry-level to associate engineers 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.
- Computed hardware requirements for peaks (Prime Day, Black Friday, etc.) and pushed management for extra hardware as needed.

**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.

# PROJECTS

**Drone-Megaddon**Developed drone fleet management app.

Hand-2048 Enhanced 2048! to respond to hand motions.

My Stock Exchange
Created AI offering stock
recommendations and
price projections.

Tweet Miner
Mined 200GB of tweets
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

## ME 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

## **7** 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

Toastmasters International (Member)

Amazon Security/Privacy Certifier and Operations Samurai

Avid Numismatist

Amateur Historian

Personal Portfolio Manager (~\$500K in