# **EDUCATION**

## Carnegie Mellon University

### Master of Science in Machine Learning

math Aug 2021 - Dec 2022

Pittsburgh, PA

 Working with DELPHI research group, lead by CMU's head of ML Department. I work on COVID-19 trends and impact, where we work with Facebook to monitor the spread and impact of the COVID-19 pandemic and vaccination.

# Vellore Institute of Technology

### **Bachelor of Technology in Computer Science and Engineering**

## Jul 2014 - May 2018

India

- CGPA: 9.59/10.00; Major CGPA: 9.64. Rank holder & Achiever Award.
- TA for Data Structures & Algorithms; Undergraduate Research in Al.
- Best Project award for the academic year 2015-2016 and 2016-2017.
- Computer Science Program Representative & Student Council member.

### **EXPERIENCE**

# Intel

## Deep Learning Engineer (I / II / III)

m Dec 2017 - Aug 2021

Pangalore, India

- Built Health AI, smart city and mobility products as part of a highly selective innovation group, working on the R&D of new product verticals at Intel.
- Core & founding team member of the AI/ML platform for Health AI product vertical at Intel India. The platform can be extended for retail and fintech.
- Led the technical execution to build solutions to achieve faster and cheaper COVID-19 testing and genome sequencing in India.
- Developed an Al-based risk stratification algorithm for the hospitals to admit the patients based on their risk level.
- Designed the City Stack (India Urban Data Exchange), which got adopted as the data exchange platform for all smart cities in India.
- Built a Mobility platform that uses Mobileye collision avoidance (ADAS), fleet telematics, fleet health & driver monitoring data to provide solutions to save lives on Indian roads by improving fleet safety, reliability and predictability.
- Co-founded an internal AgriTech venture as part of Emerging Growth Incubation, which selects new ventures with USD 1 Billion potential.
- Contributed to OpenVINO and Movidius Edge AI products at Intel. Movidius powered the first satellite with AI on board.
- Wrote whitepaper on Al-Driven Medical Imaging Powered by Intel and Philips (Optimized for upto 188x faster inference for AI models).
- Mentored 3 incubating startups, and 5 interns and recent college graduates.

### Wingify

### **Data Science Intern**

# Jun 2017 - Jul 2017

Pune, India

• Built features for personalized push notifications to users to reduce spam & decrease the unsubscription from services.

### Cerelabs

#### **Data Science Intern**

m Dec 2016 - Jan 2017

♥ Mumbai, India

• Built models to predict machinery failures using ball bearings dataset.

## Knolskape

#### Software Developer Intern

# Jun 2016 - Jun 2016

P Bangalore, India

• Gamified a product to increase the interest of the general audience.

# **SKILLS**

Python Machine Learning, Deep Learning Docker, Kubernetes, MLOps Message Brokers OpenVINO Databases Cloud Terraform, Helm

# MOST PROUD OF

Technologist of the Year, Intel BU level - Youngest winner ever

Best Project Award, Intel BU level award for Health AI product

Most Innovative Project Award, Intel Site level award for Health AI product

Recognition Awards, Intel 25+ recognition awards, many from VPs

Multiple Hackathon Winner By Microsoft, UT Dallas, Atlassian, etc

Secure & Private AI Scholarship Challenge Recipient of this scholarship by Facebook

MIT Technology Review Global Panel

# TECHNICAL LEADERSHIP

Invention Disclosures 10+ Invention Disclosures at Intel

## **Publications**

- Automated emergency paramedical response system, HISS 6 (1), 1-16, Springer.
- PageRank Algorithm using Eigenvector Centrality-New Approach, GJPAM.
- COVID-19 risk stratification & mortality prediction in hospitalized Indian patients.
- Clinico-Genomic Analysis Reveals Mutations Associated with COVID-19 Disease Severity: Possible Modulation by RNA Structure, Pathogens 10 (9), 1109.
- Smart City: An Intelligent Automated Mode of Transport Using Shortest Time of Travel, Springer (Book chapter).
- Deep Neural Network inference acceleration, DTTC (Intel's top conference).

# **Invited Speaker**

10+ sessions. Topic: AI, AI Ethics & Privacy, Differential Privacy at FOSSASIA, GHC India, Amazon Al Conclave, DataHack, etc.

### PAYING IT FORWARD

www.covidsos.live

COVID-19 chatbot that dynamically curates essential resources and vaccination slot availability for those in India. Helped over 2 Million people. Called out by Twitter, Google and other major media outlet.

Stanford Scholar Initiative (AI/ML track) Initiative to make research accessible. Led the groups to create research talks for the influential papers from top conferences.

Swachh Map App, Intel (Contributor) Allows users to pin unclean areas in India, notifies the authorities and tracks their progress. Called out by the Prime Minister.

**Practical Approach to Deep Learning** Course curriculum design (PES University)

# RECOMMENDATIONS

(As on LinkedIn)

I first met Mashrin when he joined my team as an intern. In a short span of three years, he has demonstrated several qualities of a leader: strong drive, determination and focus, a strong sense of ownership and responsibility, combined with good people skills and an engaging personality. His contributions were critical in helping Intel deliver the first open Data Exchange platform for smart cities in India, which was adopted by the Government of India as the IUDX (Indian Urban Data eXchange) platform for all smart cities. For his next project, Mashrin was one of the founding members of the team that was tasked with developing a Healthcare AI platform. Mashrin led the technical execution and made significant contributions both to the architecture and the implementation. Mashrin also led the efforts to build a COVID-19 product offering that helped achieve faster and less expensive testing and coronavirus genome sequencing. I have managed him directly and indirectly on multiple projects. His energy and enthusiasm to learn and grow is impressive and given the right platform, he will develop into a well-rounded individual who no doubt will make a big contribution to the industry, the world and society at large.

# Sidhartha Mohanty (Senior Director of Engineering, Intel)

Working with Mashrin has been a very enlightening experience. He shows confidence and expertise beyond his years of experience, great skill in programming as well as understanding of algorithms and systems. He is extremely efficient in executing project related tasks and is constantly thinking of new and innovative ways to do things. It has been great working with him on a number of invention disclosures and paper submissions. Mashrin is a great example of the new generation of technologists who will be soon be contributing to technology and industry, giving the tech world a lot to look forward to.

## Sean Lawrence (Software Architect, Intel) - One of Intel's Top Innovator

I have known Mashrin since he started his corporate career at Intel. While Mashrin's technical knowledge and expertise is top notch, what has impressed me most about Mashrin is his ability to think outside the box and come up with innovative solutions to any challenging problems he is given. He is passionate about exploring new areas, be it business or technical and this was reflected in the multiple submissions he was able to do for the incubator programs run in Intel. His efforts to build an app/bot to help search for covid resources is also a testimony to this. Mashrin also is not siloed into his project or team and is always is interested in looking at the big picture and understanding corporate level decisions and directions and analyzing how it impacts his immediate environment. This is a trait that is rarely seen, especially in a person in the early stages of his career.

### Rajeev Rajasekharan (Engineering Program/Product Manager - ADAS, Intel)

I have seen Mashrin grow as an Engineer from an intern to a tech lead. He has all that it takes to succeed as a technologist-Strong technology foundations, Analytical and Inquisitive mind, Determined, Ambitious, Team player, and ability to work and network across the experience spectrum. However, what sets him apart from his peers is his "can do" attitude which complements his strengths. He is an asset to any team.

# Raghavendra Bhat (Principal Engineer, Intel)

I was mentored by Mashrin during my internship at Intel. I honestly could not have asked for a better mentor. He is extremely helpful, down to earth and well versed in the field of ML. He encouraged me to think out of the box and not to be afraid of failing. He was very patient with any questions that I had and explained the tasks with great clarity. I am also amazed by his innovative abilities and how he can bring those ideas to execution in no time. It was an absolute pleasure to work with him and I am so grateful that I got an opportunity to learn so much from him. I have grown both as a person and professionally, all thanks to Mashrin!

# **Muvazima Mansoor (Former Intern, Intel)**

I had the opportunity to work with Mashrin building a very ambitious AI solution to bring to Intel a 1 Billion DLS. The project was selected over 250 projects in the Intel Incubation Program 2021 to pitch to Intel Vice Presidents. Mashrin always was passionate, high committed, very talented to understand the project & business needs. He has the skill to easily define clear next actions. Mashrin was a key player in the team to build the strategical thinking, but also he did an outstanding job pitching in front of Intel executives. The best part of all the journey was build a trust relationship and friendship with Mashrin.

Jorge Gonzalez Barba (Customer Product Engineer, Intel)