Manish Balamurugan

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SUMMARY

Interested in Data Science, Machine Learning and AI.

Co-founded Hyphora, a tech startup focused on student development. Authored & published 2 papers on Machine Learning. Experience with software development and data analysis. Worked with Python, Java, JS, and C++.

Looking for internship opportunities in Tech Development/Consulting & would love to contribute from my experience.

EXPERIENCE

Undergraduate Researcher, Manbachi Lab @ Johns Hopkins University

Oct 2020 - Present

- Worked with a team of industry researchers to develop medical solutions powered by machine learning
- Published as a First Author in Medical Imaging 2021: Ultrasonic Imaging and Tomography and Frontiers in Biomedical Devices.

Founder, Hyphora

Sep 2020 - Apr 2021

- Tech startup created to enhance the education and research pursuits of high school and college aged students throughout the USA.
- Pre-seed funding discussions with Reach capital. Gathered 3,000+ signups for the products beta launch via social media campaigns.
- Developed the online platform using Google's Flutter SDK and Firebase along with HTML/CSS and JS.

Undergraduate Researcher, Walsh Lab @ University of Virginia

Mar 2021 - Present

- Worked as a Data Analyst in the Walsh Lab & created reports and analyzed healthcare data from UVA's School of Medicine.
- Performed in-depth data validation on data recovered from genetic mapping projects in the lab using R and Python.

SWE Intern, Keva Health

Dec 2020 - Mar 2021

- Worked with Keva's Product Management team on development tasks related to Keva's mobile application
- Used Flutter and Firebase to create a direct-to-physician marketing solution. Used Swift and Kotlin for development tasks for the Keva Health App.

Data Intern, Simmer (YC19)

Jun 2019 - Sep 2019

- Worked as a Data Intern at Simmer (YC19). Developed web-based algorithms and data processing techniques.
- Developed a web-scrapper built on selenium (python) to scrape menu items for various restaurants based in the Bay Area.

PAPERS ON MACHINE LEARNING

[1] USDL: Inexpensive Medical Imaging Using Deep Learning Techniques and Ultrasound Technology

Developed a novel model that employs deep learning algorithms in order to reconstruct and enhance corrupted ultrasound images. First author acknowledgment.

[2] Automatic detection of cotton balls during brain surgery: where deep learning meets ultrasound imaging to tackle foreign object

Developed a machine learning powered pipe flow that allows for real time detection of cotton balls during neurosurgical procedures. First author acknowledgment.

EDUCATION

BA in Computer Science and Applied Statistics, Computer Science

Aug 2020 - Present

University of Virginia

SKILLS

Programming Languages: Java, Python, C++, JS, HTML/CSS, Swift, R

Development Environments: Eclipse, XCode, VSCode

Libraries: Flutter, SwiftUI, Firebase, Gatsby, React, React Native, Expo, Angular

SELECTED AWARDS

International Science and Engineering Fair Finalist, Regeneron [2020]

Grand Prize at Fairfax County Science and Engineering Fair, Fairfax County Public Schools [2020]

First Place in Biomedical Engineering Fairfax County Science and Engineering Fair, Fairfax County Public School [2019]