#### Contact

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## Top Skills

Medical Image Processing

Matlab

Python(Medical image processing)

## Languages

Telugu (Elementary)
English (Full Professional)
Malayalam (Professional Working)

#### Certifications

Intermediate Python for Data Science

Fundamentals of Project planning and Management

Intro to Machine Learning

Image Data Augmentation using Keras

Deep Learning On-ramp

## Honors-Awards

Grade 2 of Music

Value Education Workshop On Leadership

Hackathon(Surgical Innovation)

### **Publications**

Application Of Selective Region Growing Algorithm In Lung Nodule Segmentation

APPLICATION OF DECISION TREE BASED SUPPORT VECTOR MACHINE IN LUNG NODULE CLASSIFICATION

# Jaisil Rose Dennison

Graduate Student| Al in medicine| Kaggler Houghton

## Summary

3D Medical image analysis for telesurgical vision system and diagnostic purpose is my area of interest. With two internships and two projects in hands relevant to medical image processing, I am pursuing my master's in computer engineering. "Let your innovation be with compassion and passion"

My passion for innovation is about medical image analysis. I fell in love with this field of telesurgical vision after attending a workshop conducted by LANCET Commission on Global Surgery for surgical services in rural regions. I am in my pursuit to innovate for tele surgical vision system.

Currently I am doing master's in computer engineering with special focus on image analysis. As a part of curriculum, I did courses and projects related to medical image processing and image processing. I had a chance to do Coop in Promaxo where I learned about 3D medical image processing and python.

I did my undergrad in Electronics and communication engineering with a specialization in signal processing. The part of the curriculum includes projects, seminar presentations and paper presentations which enhanced my skills for real world problem. One of my favourite projects is Lung cancer detection using decision tree based SVM where I earned experience about image data manipulation, machine learning. Presented two papers and got published in IEEE journal. I had a two weeks internship training on image processing in UNIQ technologies where I learned about image processing using matlab.

The most valuable achievement that I would say is the winning in Hackathon conducted by LANCET Commission on Global Surgery for surgical services in rural regions. We as a team named 'Lungathon' presented about the lung cancer detection using Decision tree based SVM algorithm and won the second place.

I am also passionate about music and singing (gospel).

## Experience

Michigan Technological University 1 year 8 months

Graduate Student January 2019 - Present (1 year 8 months) Houghton, Michigan, US

Learning Center Coach September 2019 - December 2019 (4 months) Houghton

Help students and peer in learning the electrical and electronics concepts. Enjoying this work cause I love teaching while I am learning.

#### Grader

September 2019 - December 2019 (4 months) Houghton, Michigan

Grader for the subject of Laser systems. Helping the staff in grading the academic works like assignments of the student. Getting some experience in the academic working environment and reinforcing my laser system concepts.

## Promaxo MRI Engineer Intern January 2020 - April 2020 (4 months)

Oakland California

A new start in my field [ Medical Image Analysis ]. Got to engage with a vibrant team where I had a chance to work on project.

Got some hands on experience in Python itk, mayavi libraries.

Got experience on 3D image registration using python.

Had a chance with team comprising people from different department.

Graduate Student Government at Michigan Technological University Electrical and Computer Engineering Representative October 2019 - January 2020 (4 months)

Houghton, Michigan

Uniq Technologies Image Processing Intern December 2016 - December 2016 (1 month)

## Coimbatore Area, India

Learnt hands on experience on matlab for image processing and part of it, we as an intern team completed project titled 'Brain Tumor Detection using GUI'.

## Education

Michigan Technological University

Master of Science - MS, Computer Engineering · (2019 - 2021)

Karunya Institute of Technology and Sciences
B-Tech, Electronics and Communications Engineering · (2014 - 2018)