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Major: Applied Mathematics

# Project Experience

## 2021.6-2022.08

Project: Sparse Cloud Segmentation on Milimeterwave Radar Data

Abstract: In the cross-field of mathematics, communication and machine learning. Based on creative points of mathematical theory, achieved communication task through machine learning methodology.

## Python

1. Coding for 12000+ lines;

2. Pytorch: Design Machine Learning Models;

3. Data Visualization: Process and Analyze Data;

#### **MATLAB**

1. Coding for 8000+ lines;

2. Deep Learning Tool Box: Design and Apply Machine Learning Models;

3. Data Visualization: Process, Visualize and Analyze Data;

4.Data Processing: Read, process and save data to .hdf5,.txt,.mat;

#### Latex

1.Paper Writing. One paper being reviewed.

## Hdf5

1.Data: Visualize and save data.

## PS

1. Making Showing Board for Academic Exhibitions. Link: https://github.com/Song213200032/MyBoard/blob/main

#### PR

- 1. Editing Videos.
- 2. Uploaded Videos on Bilibili link:https://www.bilibili.com/video/BV1w44y1L7jM/?spm id from=333.999.0.0

## Personal Statement

I'm currently an undergradate student who is going to study in Berkeley for 22 fall. My major is mathematics. Since I've known that AI research requests strong mathematical and analytical skills, I choose mathematics as my major. Besides learning mathematics, I've been working on programming out of my AI engineer dream. Prof.Wang supervised my first project, who received his Ph.D. degree in the Department of Computer Science and Engineering at the University of Minnesota, Twin Cities in March 2017.This is his lab link:http://47.102.214.205/.

Now I'm have been working on a Computer Vision project under Prof.Wang's supervision for one year. I've mastered basic skills on how to find and read paper. I can process and analyze data in the type of .mat,.txt,.h5.

Besides, I have a great passion of exploring unknown area. I'm willing to spend time each week to work on an project so as to improve scientific literacy.