# Seemakurthi Kushal Kumar

FINAL YEAR UG STUDENT FROM IIT DHARWAD

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## SUMMARY

I'm a Final Year Undergraduate Student of Mechanical Engineering at *IIT Dharwad*. I'm quite an enthusiastic student and eager to learn new skills. Grasping knowledge is one of the most important motives for me and learn new skills in no time. I'm highly motivated that I can work alone or Team.

## PROJECTS

### SIMULATING SELF-DRIVING CAR

**Neural Network Architecture**  *Jan 2021 - Apr 2021*

Project-based on Deep learning to model to make a simulating car operate on a trained Deep Learning model. By taking screen recording and speed of the Vehicle as the input to the model. The model progressed from the basic ML model to the CNN applied Deep Learning Neural Networks.

### STABILITY PREDICTIONS IN MILLING PROCESS USING A SIMULATION-BASED MACHINING LEARNING APPROACH

**ML architect**

Here I made a system that works on ML algorithm. And I've modeled a system that can predict the stability of the milling machine of CNC machining.

### SPY-DER

**Arduino programmer and also Handled Mathematical part**

Made a model of Spy -Spider with functioning legs using Arduino. Using this model, one can see stream a live video. And we use forward and reverse kinematic concepts and fed them to the Arduino.

### MUSIC-RECOMMENDATION

**ML Architect**  *Sep 2020 - Dec 2020*

Here we made a recommendation system that works on the ML algorithm. And I've modeled a system that can play similar songs and clustered songs of resonating feel. In this, we used various ML techniques such as Recommendation systems, K-means, KNN, dbscan, PCA etc.,

## EDUCATION

### Mechanical Engineering

**IIT Dharwad**  *Aug 2017 - May 2021*

Initially, I opted for Mechanical Engineering at **IIT Dharwad**, completing 1st year I got interested in programming. I opted for courses such as Machine Learning, Deep Learning later. My present working areas are Machine Learning, Deep Learning, Computer Vision, Competitive coding Python.  My current CPI: 7.59

### 12th Class

**Sri Chaitanya Academy Junior College**  *May 2016 - Aug 2017*

I pursued MPC (Mathematics, Physics, Chemistry) course. And scored 962(out of 1000).

## CERTIFICATION

### Machine Learning
**Stanford University**  *may/2020*
Opted Machine Learning Course in Coursera by Andrew Ng.

### Structure Machine Learning Project
**Cousera**  *June 3, 2020*
https://coursera.org/share/2348322c4a8512544caeff822cadadd6

### Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
**Cousera**  *May 27, 2020*
https://coursera.org/share/afbc221bdaba6e6f865c217b4aa6d4a7

### Neural Networks and Deep Learning
**Coursera**  *May 3, 2020*
https://coursera.org/share/ad3273b4de26757285dc190ef829490c

## SKILLS

| | | |
|---|---|---|
| Python | Matplotlib | |
| Tensorflows | Matlab | |
| Machine Learning | opencv | |
| Deep Learning | C++ | |
| numpy | Django | |
| Seaborn | PID control | |
| pandas | | |

## EXPERIENCE

### Mentor
**IIT Dharwad**  *Aug 2018 - May 2019*
Been a mentor in Mentorship program.

### Member of Organising Team
**IIT Dharwad**
Been DIAL organizing team active member, IIT Dh, 2019.

## LANGUAGES

English                          Telugu
Hindi

## AWARDS

### District 2nd ranker in Maths & science Olympiads
SOCIETY FOR ADVANCEMENT OF SCIENCE & TECHNOLOGY

### Participated in DevHack 2.0
**DevHack 2.0 in Parsec (IIT Dh Tech meet) 2020**
We made a prototype of sensory mobile device that can sense various factors for a crop .