IIITDM KANCHEEPURAM

Internship Report

COE17B031
Tarun Kantiwal

Internship Provider

Dr. Munesh Pal SIngh
(Assistant Professor at IIITDM Kancheepuram)

Project

1. Design and implementation of a distributed IoT system for the monitoring of water quality in aquaculture

2. Prediction of Dissolved Oxygen from pH and Water Temperature in Aquaculture Prawn Ponds

Where i Was ?

As in this pandemic situation the whole work was done from HOME.

My Role :-

1. IoT Developer
2. Machine Learning (Create Model)
3. Web Developer
4. Mobile Application Developer
5. Cloud Data Handling
6. Backend Handling
7. Testing and Debugging

Tasks

Writing Arduino and

Update Prof. Regarding Project

Learn IoT

Learn Cloud Computing

Website Developing

Upload Data to Cloud

Learn Machine Learning

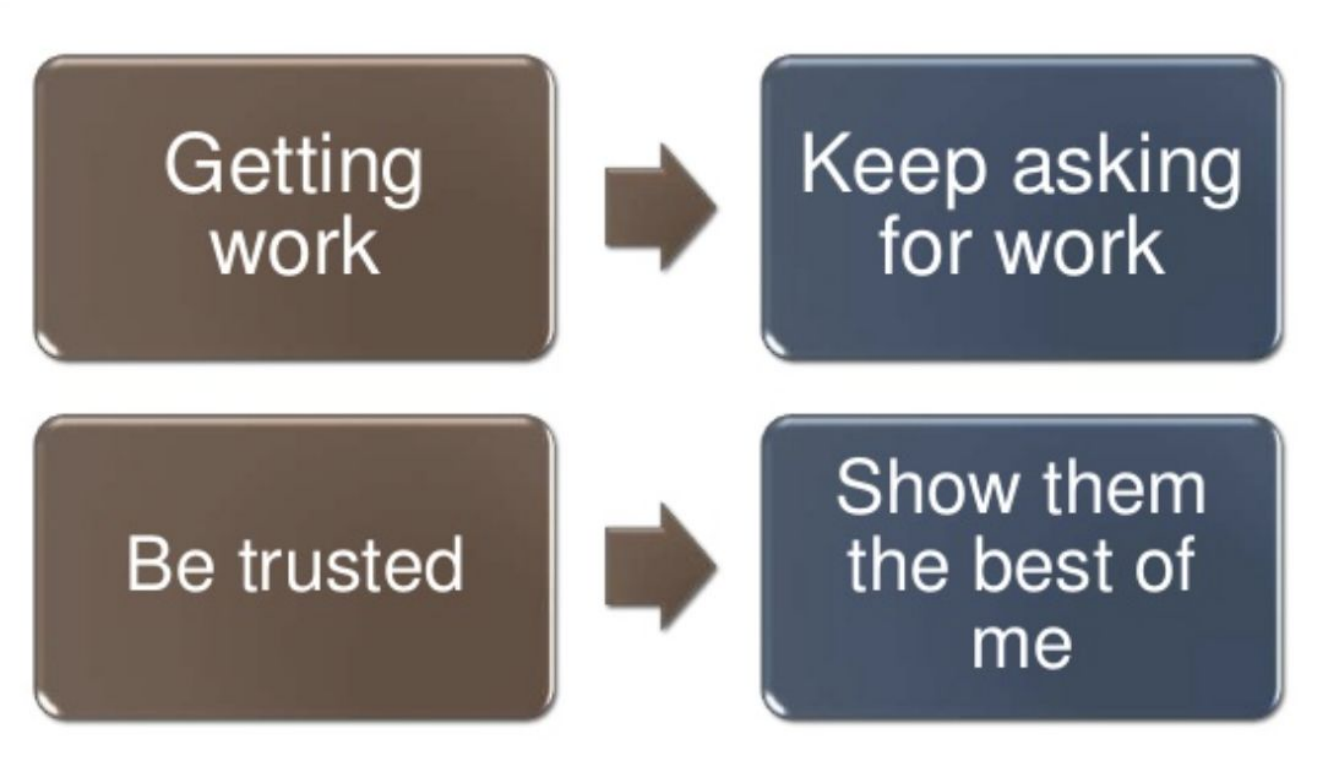
Learn Deep Learning (ANN)

Web Hosting

Mobile App Development

Etc.....

Challanges and Overcome :-



Supervisor :-

Dr. Munesh Pal Singh

Outcomes :-

1. If you don’t know something you can always go and ask
2. Be simple, professional, formal, creative
3. Organizing your work and put a timeline make your work easier
4. You can learn by observing more than asking
5. CAR : - Case, Action and Result. Its the technique we need to use if we want to accomplish any task in an effective way

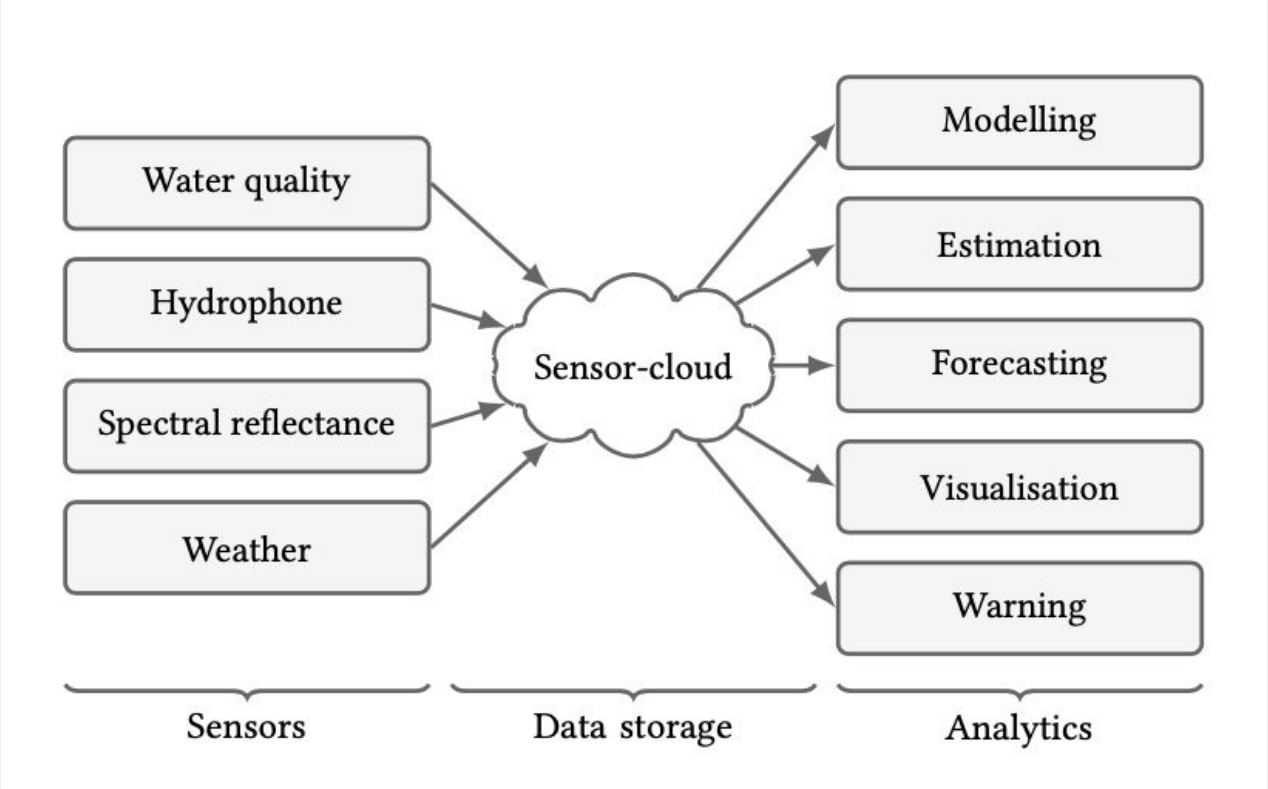
Outcomes :-

1. How to use the mind map for brainstorming.
2. It’s important to record and update Supervisors.
3. The Real life problem are very different from university problem (Assignment).
4. Never be afraid or ashamed for asking help and speak.
5. Don’t afraid to show your design and ideas even if those ideas are wild or stupid someone can make inference from them also.

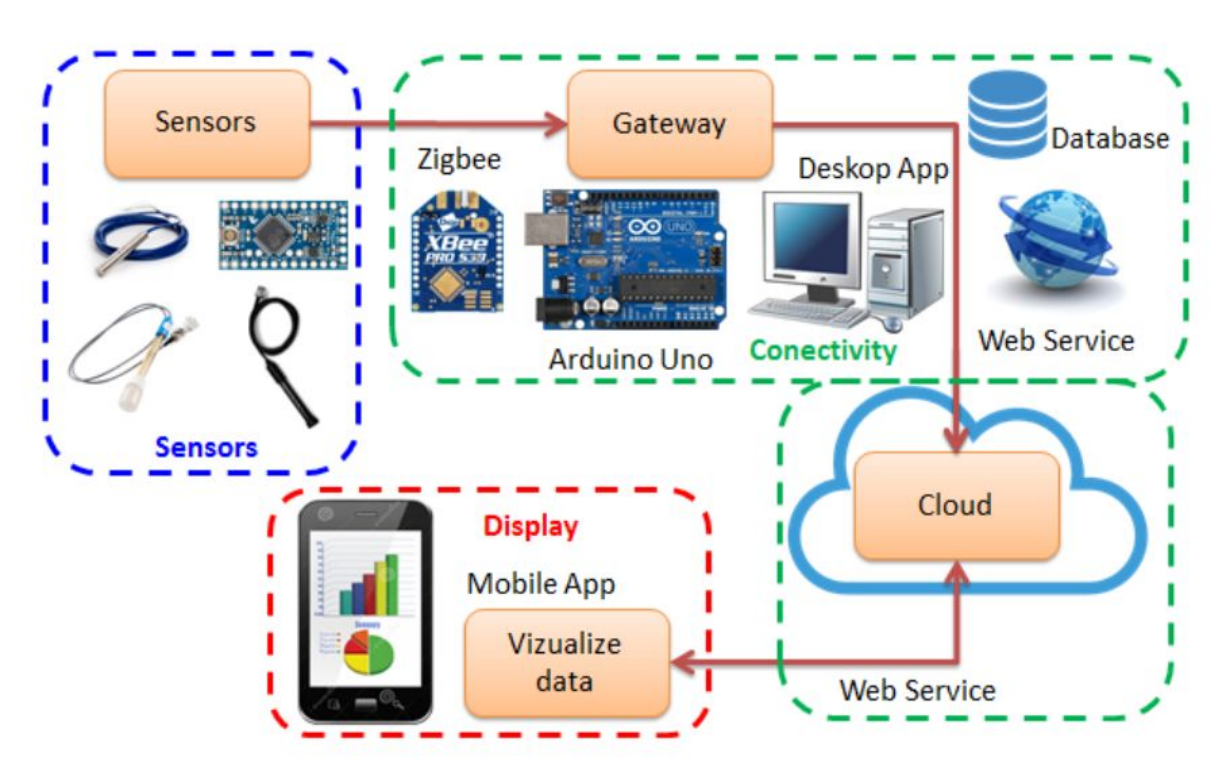
Technology used :-

1. React JS For web App Development.
2. React Native For Cross platform Mobile Applicationn Development.
3. Tensorflow, Lite, JS, For all Mobile and Web Model .
4. Internet of thing (Arduino UNO).
5. Cloud Detail Fetching and Upload Data (ThingSpeak).
6. Node js Backend.

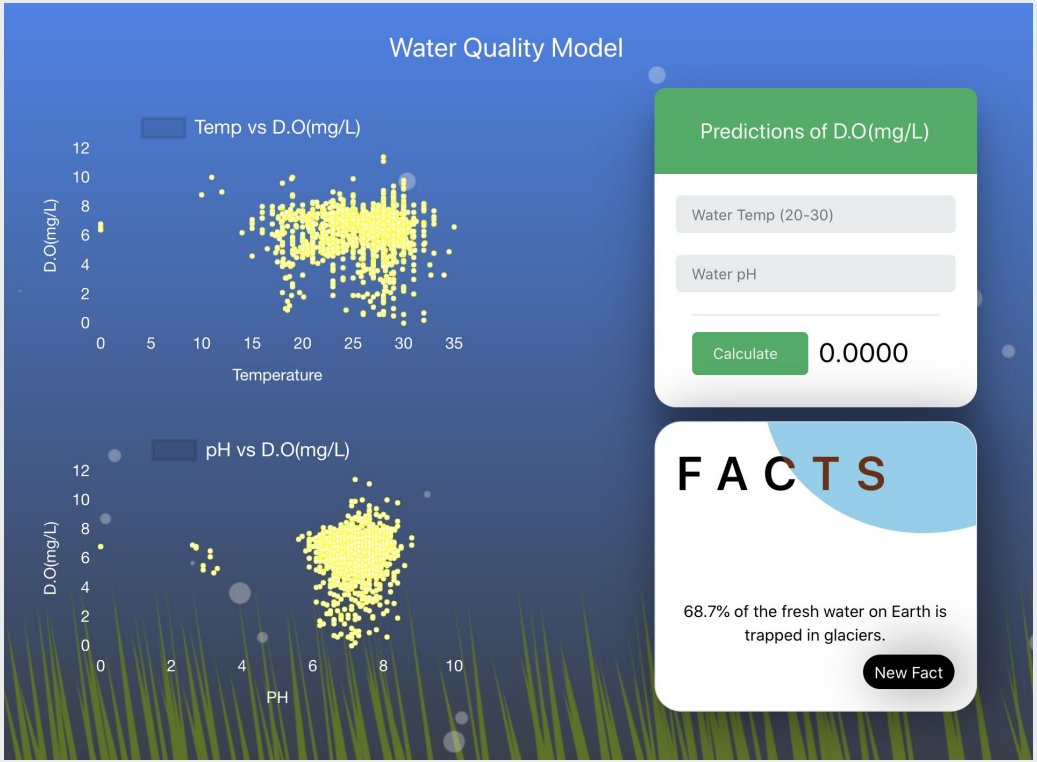
Complete Project WorkFlow :-

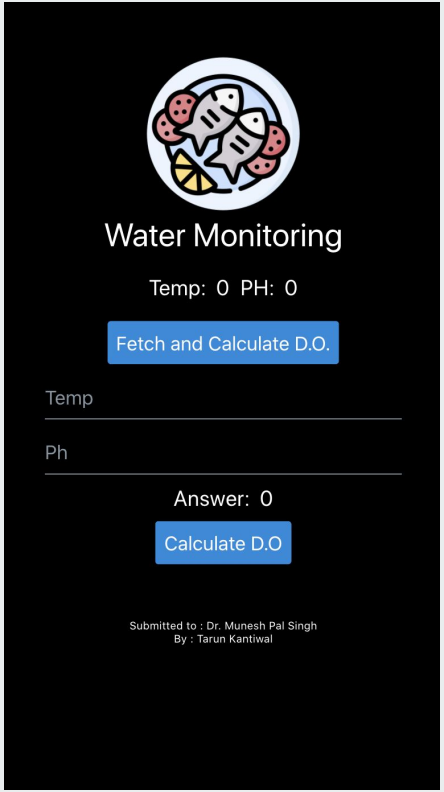


Complete Project WorkFlow :-



Final Outputs: - Web and Mobile App





Learning Resources and Certificates :-

1. Coursera (Certificates are attached)
2. Stack Overflow
3. Github Issues
4. Stack Exchange
5. Kaggle

ETC.....

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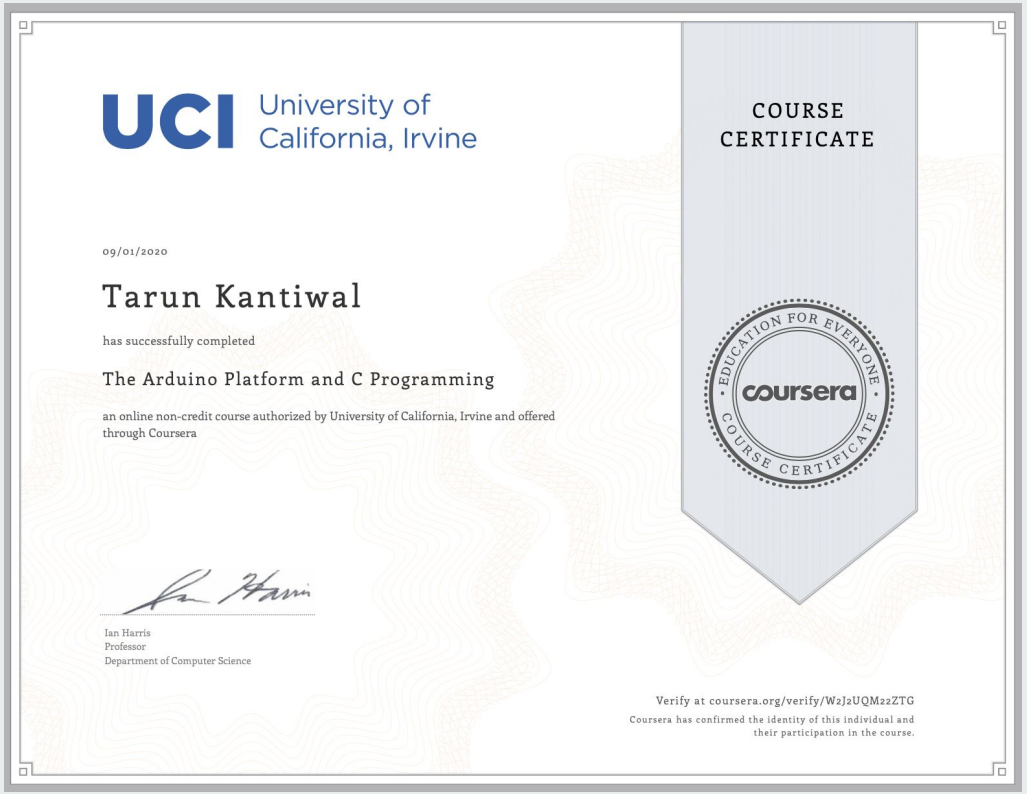
IOT (Coursera)



UCI University of California, Irvine

COURSE CERTIFICATE

09/01/2020

Tarun Kantiwal

has successfully completed

The Arduino Platform and C Programming

an online non-credit course authorized by University of California, Irvine and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Ian Harris
Professor
Department of Computer Science

Verify at coursera.org/verify/W2J2UQM22ZTG

Coursera has confirmed the identity of this individual and their participation in the course.

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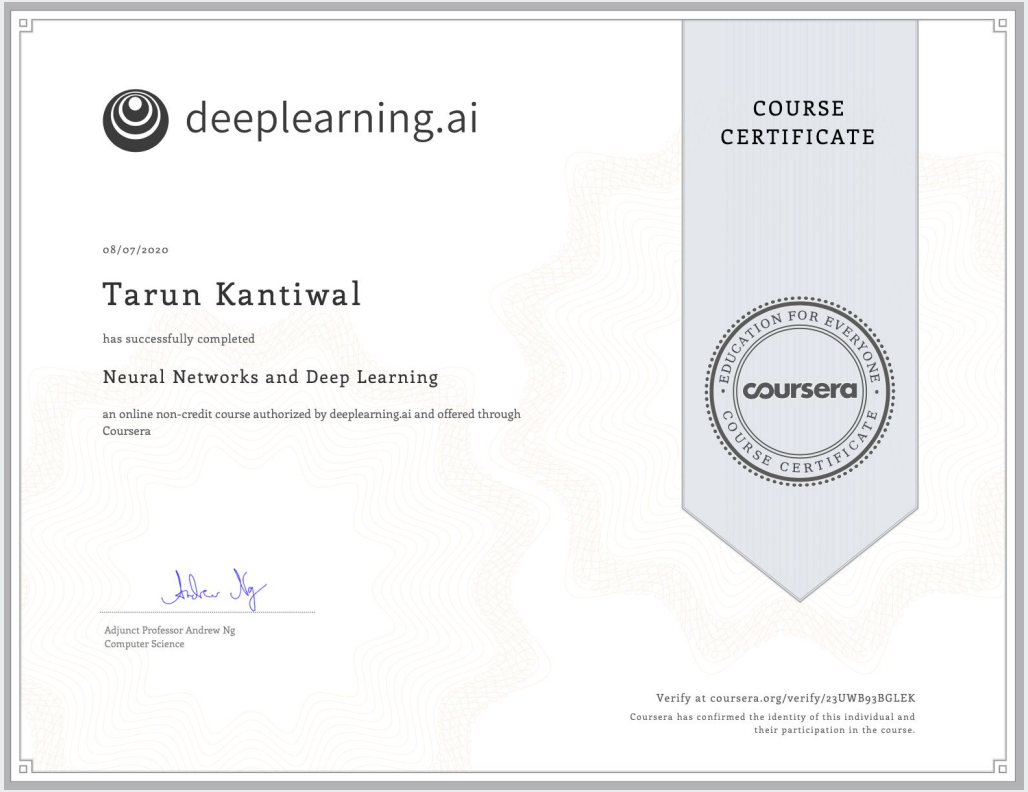
Deep Learning (Coursera)



deeplearning.ai

COURSE CERTIFICATE

08/07/2020

Tarun Kantiwal

has successfully completed

Neural Networks and Deep Learning

an online non-credit course authorized by deeplearning.ai and offered through Coursera

Adjunct Professor Andrew Ng
Computer Science

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coursera

Verify at coursera.org/verify/23UWB93BGLEK

Coursera has confirmed the identity of this individual and their participation in the course.

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Tensorflow (Coursera)