

# Vignesh Kandasamy

I have created Thazhal to solve the problems with deep technology which helps to improve the business sustainability and livelihood of the people and to improve the understanding of climate change using geospatial technology.

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## EXPERIENCE

### Centre for Economic Performance, London School of Economics and Political Science, UK - Data Associate

Oct, 2023 to Oct 2024 - PRESENT

### Thazhal GEOSPATIAL ANALYTICS Pvt Ltd, Tirunelveli, Tamil Nadu — Founder

September 2021 - PRESENT

### Satyukt Analytics, Bangalore — Product Manager

May 2020 - October 2020

The role of Product Manager includes understanding the client requirements and coordinating a team to create an automated farm scale data delivery system which can be accessed through an API.

### Satyukt Analytics, Bangalore — Remote Sensing Analyst

July 2019 - April 2020

As Remote Sensing Analyst worked on classification, flood detection, image preprocessing and a web portal for water pipe line monitoring.

### Satyukt Analytics, Bangalore — Intern

March 2019 - June 2020

### Cognizant Technology Solution, Coimbatore — Programmer Analyst

May 2016 - June 2017

As an automation tester, I created test scripts for insurance websites.

## SKILLS

Product Management

Marketing/ Sales

PostgreSQL

Python

R

QGIS

Web Scraping

API

Google Earth Engine

## AWARDS

### National Award for e-Governance

2019-2020 (GOLD) from Department of Administrative Reforms and Public Grievance, Government of India for providing Farm Scale Data from multi Satellite.

Awarded as **Best Designer** from Computer Science and Engineering association for the academic year 2012-2013..

## LANGUAGES

Tamil, English

## EDUCATION

**Indian Institute of Remote Sensing , Dehradun — Post Graduate Diploma in Geoinformation Science for Earth Observation Under JEP of IIRS, ISRO, Dehradun & ITC, University of Twente, Netherlands.**

September 2017 - July 2018

**National Engineering College, Kovilpatti — B.E Computer Science and Engineering**

August 2011 - May 2015

## PROJECTS

### **Drone Survey for Thamirabarani River to find the hotspots**

The objective of the survey is to identify the problematic areas in the river using very high resolution images and field data.

### **Drone Survey for monitoring Solar panels in Pokaran**

The objective of the survey is to monitor the progress of the solar panel installation in the solar plant.

### **Ground Water recharge potential for Tirunelveli**

The objective of the work is to find the high recharge and low recharge places in Tirunelveli district to make effective measures for the groundwater recharge.

### **Scalable automated farm scale data provider**

The broad objective of the assignment was to deliver farm scale data to the end user. Farm scale crop health monitoring and irrigation monitoring is helpful to give the farming advisory. The end user can get such data based on his farm boundary through an API. The automated algorithm is designed for accepting farm boundaries and delivering crop health and irrigation data.

### **Flood damage assessment using sentinel 1 C band data**

To compute the damage assessment due to flood using microwave data. The damage assessment helps the Govt/public/private to know the amount to the relief fund is necessary to mitigate the changes.

### **WebGIS portal for water pipeline monitoring**

A web GIS dashboard is created to visualize spatial data and monitor the

supply of water to each division in Bangalore.

## **Calculating temporal change for Surface Water of Pond in part of Tirunelveli Taluk**

The objective of the project is to develop surface variation of ponds. The surface water storage is crucial for agriculture and for ground water recharge. The variation of surface water can depict the temporal change of water level and rainfall in the area of study.

### **Publication**

#### **Location based Advertisement for Mass Marketing is published in ISPRS TC V conference — DOI**

<https://doi.org/10.5194/isprs-archives-XLII-5-189-2018>

#### **Range extension of pyrosomes in oligotrophic waters of the Indian Ocean (2021) - Current Science**

#### **Mass occurrence of blue button hydrozoan fauna in the Lakshadweep Archipelago, India (2022) - Current Science**

#### **Deformation Analysis/ Cultural heritage monitoring:**

1. PSInSAR-Based Surface Deformation Mapping of Angkor Wat Cultural Heritage Site is published in Journal of the Indian Society of Remote Sensing (2020) — DOI  
<https://doi.org/10.1007/s12524-020-01257-7>
2. V. Kandasamy and S. Kumar, "Angkor Wat Deformation Monitoring from 2017 to 2021," *2021 IEEE International India Geoscience and Remote Sensing Symposium (InGARSS)*, Ahmedabad, India, 2021, pp. 122-124, doi: 10.1109/InGARSS51564.2021.9792040.

#### **Book:**

3. Spaceborne Synthetic Aperture Radar Remote Sensing Techniques and Applications  
*Edited By Shashi Kumar, Paul Siqueira, Himanshu Govil, Shefali Agrawal* **Chapter 14 | 16 pages (313-328)**

SAR for Cultural Heritage Monitoring

*By Vignesh Kandasamy, Shashi Kumar*

<https://doi.org/10.1201/9781003204466-14>