AISHWARYA V

Contact: +91-9443246731

Email: aishwarya386@gmail.com

LinkedIn: https://www.linkedin.com/in/aishwarya-velmurugan-511501138/

Educational Qualification:

Degree	Year of Passing	Institute	Board/University	Percentage/ CGPA
M.Tech (Remote Sensing & GIS)	2022	National Institute of Technology Karnataka	National Institute of Technology Karnataka	9.35
B.E. (Civil Engineering)	2019	Karpagam College of Engineering, Coimbatore (TN)	Anna University	9.32
Class XII	2015	Sree Dharmasastha Matric Hr. Sec School, Coimbatore (TN)	State board	88.4
Class X	2013	Sree Dharmasastha Matric Hr. Sec School, Coimbatore (TN)	State board	93.6

Skills:

Programming	JavaScript, HTML, Python
GIS	QGIS, ESRI products (ArcGIS, ArcMap), Google Earth Engine, ERDAS IMAGINE
Design	3DS MAX, AutoCAD (2D modeling)
Algorithms	Image processing (Wavelet transform), Machine learning (Random Forest, SVM, Regression)
Remote Sensing & GIS	Digitizing, Geo-referencing, Image Classification, Cartography, DEM generation, Optical & SAR datasets

Project:

- **PG Project (Major) – A study on crop rotation assessment using DWT analysis on Sentinel-1 SAR data** *(2022)*
  - I have mapped crop rotation using Sentinel-1A mission SAR data.
  - The temporal backscattering behavior of croplands depicts the crop growth stages and helped in mapping crop rotation pattern in an agricultural land.

- **PG Project (Minor) – Identifying municipal solid waste dumping site location using AHP and GIS techniques: A Study of Coimbatore district, India** *(2021)*
  - The objective of this project was to determine suitable alternate dumping sites in the Coimbatore district to fulfill the present needs.
  - Potential dumping sites are selected based on nine different criteria and priority of each criteria is assigned with the help of Analytical Hierarchical Process (AHP) technique.

- **UG Project (Major) – Experimental study on Reactive Powder Concrete with composite fibers** *(2019)*
  - The goal of this project was to achieve high compressive and flexural strength without the addition of coarse aggregates.
  - The addition of composite fibers and superplasticizers helped in achieving high strength quicker than conventional concrete.

- **UG Project (Minor) – Planning, Analyzing & Designing of an Auditorium using AutoCAD and STAAD pro** *(2018)*
  - The project plans to design an Auditorium of 1000 people capacity with fire alarm systems, parking area, canteen facilities, and rehearsal rooms as per National Building Code of India 2000 using AutoCAD 2014.
  - It is then analyzed using STAAD pro v8i software and manual calculations.

Internship:

- **National Remote Sensing Centre (NRSC), ISRO, Hyderabad** *(2021)*
  Determined River water parameters using Landsat series data on River Godavari under the supervision of Mr. J. Srinivasulu, Sci/Eng 'SG'. Remotely sensed data and Google Earth Engine software helped in estimating water level and discharge based on satellite images.

- **G Ramamoorthi Constructions Private Limited, Coimbatore** *(2018)*
  A 3-week construction site experience on post-tensioned slabs.

Areas of Interest:

- GIS Analysis
- Cartography
- Land monitoring

Academic Achievements and Co-Curricular Activities:

- Scored **455** in the GATE 2020-Civil Engineering.
- Certified in **'Google Earth Engine for Land Monitoring Applications'** by NASA-ARSET *(2021)*
- Certified in **'Remote Sensing & GIS'** by NPTEL (Elite + Silver). *(2020)*
- Certified in **'Professional in Architectural Design'** by CADD Centre. *(2017)*

Extracurricular Activities:

- Participated in Map-making contest held by **IITB-ISRO-AICTE Mapathon** 2020.
- **Presented research article** "Experimental study on Reactive Powder Concrete with composite fibers" at ICMBS[1] conference 2019.
- Secured **I place in "MAD-4-CAD"** at CIT, Coimbatore. *(2019)*

Publications:

- Jeganmurugan P, Gopalan A, and Aishwarya V. (2019) "Reactive Powder Concrete with Composite Fibres" *International Journal of Innovative Technology and Exploring Engineering (IJITEE).*

- Aishwarya V, Shaik Salma, and B. M. Dodamani. (2021) "Identifying Municipal Solid Waste Dumping Site Location using AHP and GIS techniques: A study on Coimbatore district, India" *Journal of the Indian Society of Remote Sensing.* (Under Review)

- Shaik Salma, Aishwarya V, and B. M. Dodamani. (2022) "A study on temporal crop growth patterns assessment using Sentinel-1A SAR data". (Under Submission)

---

[1] International Conference on Mechanical and Building Sciences (ICMBS)