

SURAJ VENUGOPAL K.M.D.

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EDUCATION

College of Engineering, Guindy Post Graduate (M.E. Remote Sensing and Geomatics) Department of Civil Engineering	<i>September 2017 - Present</i> Overall GPA: 8.14/10
Sri Sairam Engineering College Graduate (B.E. Civil Engineering) Department of Civil Engineering	<i>July 2013 - May 2017</i> Overall GPA: 8.28/10
Av.Meiyappan Matriculation Higher Secondary School 12th (Computer Science Group) State Board	<i>June 2012 - March 2013</i> Overall Percentage: 89.99
Av.Meiyappan Matriculation Higher Secondary School 10th (Common Group) Matriculation	<i>June 2010 - April 2011</i> Overall Percentage: 88

TECHNICAL STRENGTHS

Computer Languages	FORTTRAN, Python, MATLAB
Operating System	Windows, Mac, Linux
Software & Tools	Open office, LaTeX, ArcGIS, QGIS, SNAP, ENVI, ERDAS IMAGINE

NPTEL COURSES

Digital Elevation Models and Applications	Elite Grade
Introduction to Geographic Information Systems	Elite Grade
Remote Sensing and Digital Image Processing of Satellite Data	Elite Grade
Electronic Waste Management Issues and Challenges	Elite+Silver Grade
Plastic Waste Management	Elite+Silver Grade
Urban Governance and Development Management	Elite Grade

EXPERIENCE

Space Applications Centre, ISRO <i>Graduate Internship</i>	May 2018 - July 2018
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- Worked on a mini project named "Storm Surge Modeling using ADCIRC in Bay of Bengal region".
- Analyzed in-depth about the factors which cause the cyclone formation, propagation and landfall.
- Analyzed and modeled cyclone track data to obtain surge and compared it with IMD's gauge data for the model accuracy.
- The presentation was attended by Raj Kumar, Deputy Director, EPSA, SAC, ISRO and 25 scientists of various grades from AOSG, MRG, OSD divisions and was appreciated for the good work.

PROJECTS

Post Graduate <i>Anna University - DST sponsored Project</i>	April 2018 - April 2019
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- The title is "The Study of Landslide Related Surface Displacement Using SAR Interferometry on Selected Regions of India".

- Part of a 4-member team whose work dealt with Generation of DEM using SAR Interferometry.
- Solved the issue of multiple data product download.
- Solved the issue of C-Band sensor with least temporal interval data pair with appropriate baseline.
- Conversion of relative to absolute elevation.
- Gained in-depth knowledge about the errors in accuracy of DEM.
- Gained experience in handling Linux and SNAP.

Under Graduate

December 2016 - April 2017

Experimental Study of Removal of Fluoride in water using bio-material

- Worked in a team of four people and came up with a working model of a filter that remove fluoride from water.
- Chief sample collector for fluoride samples and co-founder of the working model.
- Used the bio material "activated coconut shell carbon" and batch studies to set the initial parameters.

THESIS

Generation of DEM using SAR interferometry from Sentinel-1 series constellation

Thesis Submitted

Worked on Sentinel-1A and 1B data.

Gained widespread experience in handling SLC data product.

Studied the topography and weather conditions in my study area.

Gained knowledge about the errors in repeat-pass interferometry.

Learned how sentinel series constellation can be used.

Gained in-depth knowledge on constraints of the data.

AREAS OF INTEREST

- DEM models and its applications
- Hazard Mapping and Analysis
- Disaster Management and Mitigation
- Environmental Solutions

ACTIVITIES

Participated in one-day workshop on "Open Source GIS Programming with Python" held at IIT-Madras.

Participated in 3D printing Beginners one day workshop held at IIT-M Research Park.

Cleared GATE 2017 CE and got a score of 341.

LANGUAGES

Sourashtra	Native Proficiency
English	Professional Working Proficiency
Tamil	Professional Working Proficiency
French	Elementary Proficiency
Hindi	Limited Working Proficiency