ADITHI R. UPADHYA

Course: MSc Geoinformatics, 2018 Date of Birth: 27 March 1995 Email: adithiru095@gmail.com Mobile: +91-9730583107 CGPA: 8.96

Academic Qualification

Course	Specialization	College / Institute	Board/University	%/CGPA	Year
MSc	Geoinformatics	Bharati Vidyapeeth Institute of Environment	Deemed University	8.96	2018
		Education and Research, Pune, India			
BSc	Physics	Sri Sathya Sai Institute of Higher Learning,	Deemed University	8.5	2016
		Anantapur, India			

Electives and Technical Proficiency

Subjects/	Geoinformatics, Programming in GIS, DBMS, Web GIS, Web Services, Google API's, Remote Sensing, Microwave				
Electives	Remote Sensing, Glaciology, Statistics, Spatial Analysis, Air quality.				
Technical	Programming languages: C, C++, C#, Python, R, JavaScript, Ajax, SQL				
Proficiency	Software: Visual Studio 2017, MSSQL Server, Arc GIS, ERDAS, QGIS, SNAP, SAGA, POSTGIS, ENVI,				
	SARPROZ, Global Mapper.				
	Statistical software: R Studio, Excel, Origin, SigmaPlot.				
	Instruments handled: Garmin, microAethalometer, Atmos, DustTrak, Condensate particle Counter, BAM.				

Experience

Data Analyst at ILK Consultancy since Oct 2018 till date.

Publication/Conferences:

Conference papers:

1. Mobile-monitoring of Black Carbon and PM₂. ⁵ Air Pollution- Data only approach from Bangalore, India; ISEE 2019.

2.Performance Evaluation of Light Scattering PM 2.5 Sensors for Deployment in an Urban Sensing Network in Bangalore, India submitted at AAAR 2019 (submitted).

3. CHANGES IN VELOCITY OF FISHER GLACIER, EAST ANTARCTICA USING PIXEL TRACKING METHOD: S. D. Jawak, A. Upadhya, P. H. Pandit, A. J. Luis. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLII-5, 2018 ISPRS TC V Mid-term Symposium "Geospatial Technology – Pixel to People", 20–23 November 2018, Dehradun, India

Projects and Thesis

Current: "Mobile Monitoring of Air Pollution in Bangalore City"

- To spatially map air pollution using mobile monitors in Bengaluru, India.
- "Classification of point cloud for DEM generation" (November- December 2018)
 - To classify point cloud as ground and unclassified for a region to generate high resolution DEM.

"Temporal variations in Velocity of the Amery Ice shelf System, East Antarctica" (Jan-July 2018)

- To estimate velocity using optical and microwave remote sensing for one of the most dynamic ice shelf in the east Antarctic region- the Amery Ice shelf system. The velocity was estimated from 2001 to 2018.
- The statistical analysis was performed to study the variations occurring in the estimated velocity.
- The effect of Blue Ice Areas and Elevation and Melt duration on the estimated velocity was also recorded. The statistical analysis was performed with the obtained results using R studio. The velocity was correlated with the NSIDC published datasets using R Studio.

"A Dynamic Web Application to track assets using Geospatial Technology" (Thesis-2017)

- The methodology consisted of a four-phase approach which included data modeling of masters and transactions, spatial analysis of assets using a comprehensive system, tracking history of asset, costing and reporting to provide an advanced spatial decision support system.
- The web services play the most crucial role by providing a gateway for any device to interact with the system for e.g. a mobile.
- I have designed a user-friendly, interactive GIS interface for inserting, editing the asset's information. It provides cost of travel and asset history along with the asset data and provides an assessment of the current condition of the asset. It demarcates buffers around an asset for nearest possible replacement if any damage occurs to that particular asset.
- The real-time auditing of the asset's condition and status is performed just by a click. The details of the asset along with any other specific damage alert or a regular assessment of the asset is emailed to the concerned authority along with a report.

"Landuse Land cover of Mulshi Catchment area" (Dec 2016-Mar 2017)

- Very High-Resolution Images were used to perform segmentation using the eCognition software.
- The project was sponsored by the TATA for preparing Landuse Landcover map of Mulshi catchment area using World View 2 images.
- Techniques of visual interpretation were also used to the classification. Arc GIS was extensively used to do this process with different band combinations.

"Analysis of Gamma Decay Spectrum of Tb 159 to Dy 162 using GammaVision software and FIT" (2016)

- This project was to verify the gamma spectrum decay of Tb into Dy using two softwares called Gamma Vision and FIT.
- The spectrum was provided and then the anomalies were studied.
- The use of software was understood. Statistical Analysis was performed to understand the behavior and verify the results.

"Constructing logic gates for quantum operations" (Apr-May 2015)

- The idea behind this project was to familiarize with the various aspects of quantum information science and quantum computing especially quantum logic gates.
- The work mainly consisted of understanding the usage of quantum logic gates, their types and the process of constructing them. A few problems were solved using these logic gates.
- The differences between the classical and quantum logic gates were studied. The study ended with a brief exposure to quantum teleportation.

Training/ Certification	Year
Primer in Methods and Ecological Research 2019 at Agumbe rainforest Research Station conducted by Gubbi Labs	May 2019
Research Intern at Polar Remote Sensing Division, National Center for Antarctic and Ocean Research, Government of India, Goa	Jan- July 2018
Trainee developer at WAi Technologies, Pune for 4 months.	2017
Summer Research Fellowship Program conducted by Indian Academy of Sciences at Indian Institute of Sciences, Bangalore.	Apr- May 2015
Honors and Awards	Year

Awarded the T. R. Bhagvat Gold Medal for BSc Honors in Physics.	2016

Co- Curricular Activities

Completed an online course on "Programming with C#" organized by Microsoft Virtual Academy on edx. (Opted for Non certificate course).

Completed an online course on "JavaScript Fundamentals: Development for Absolute Beginners" by Clint Rutkas, Bob Tabor, Golnaz and organized by Channel 9. (Opted for Non certificate course).

Cleared IIT JAM for Physics.

Trained Bharatnatyam Dancer.

Part of Bharat Scout Guides in School.