

## **CURRICULUM –VITAE**

### **Personal Details:**

Name : **VASANT GOVIND KUMAR VILLURI**  
Father's Name : Mr. Satyanarayana  
Mother's Name : Mrs. Mahalaxmi  
Date of Birth : 23/07/1985  
Place of Birth : Anakapalli, Andhra Pradesh  
Marital Status : Married  
Nationality : Indian



### **Contact Details:**

Present Address: Associate Professor,  
Geomatics Division,  
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### **Academic Performance Details:**

Examination Passed	University/ Board	Year	Subjects/Discipline
Ph.D.	IIT Roorkee	2016	Geomatics, Civil Engineering
M.Tech	NIT Warangal	2009	Remote sensing and GIS
B.E	Andhra university	2006	Civil Engineering
XII	Board of Intermediate, A.P	2002	Maths, Physics, Chemistry
X	AMAAA High school	2000	Science, Hindi, English

### Research Interests & Contributions:

Surveying, Photogrammetry, Remote sensing, Image Processing, Geographical Information System (GIS), Global positioning system (GPS) and Hydrology.

### Summary of Skills and Experience:

#### A. Teaching Experience/Courses Taught

##### Under Graduate Level:

- Engineering Basic surveying, Advanced surveying, Transportation and Hydrology

##### Post graduate Level:

- Remote sensing, Image processing, Geographical Information System (GIS) and Global positioning system (GPS)

### Academic Reports

Ph.D	Knowledge base Analysis of Cloudburst with in a GIS Environment.
M.Tech	Updation of Cadastral maps using High resolution of Satellite data.
B.E	Stabilization of Sub grade soil using Geosynthtic materials –A case study

### Research Supervision & Book Published

	Number completed	Number in progress
a. Guidance at doctoral level	5	01
b. Guidance at masters level	15	03
c. Guidance at undergraduate level	20	

### Papers Published:

#### **A. International Papers (In Journal) -**

1. Kumar, S., Agarwal, A., **V. Govind Kumar Villuri**, Pasupuleti, S., Kumar, D., Kaushal, D.R., Gosain, A.K., Bronstert, A. and Sivakumar, B., 2021. Constructed wetland management in urban catchments for mitigating floods. Stochastic Environmental Research and Risk Assessment, pp.1-20. **(I.F.-2.351)**
2. Agrawal, P., Sinha, A., Kumar, S., Agarwal, A., Banerjee, A., **V. Govind Kumar Villuri**, Annavarapu, C.S.R., Dwivedi, R., Dera, V.V.R., Sinha, J. and Pasupuleti, S., 2021. Exploring Artificial Intelligence Techniques for Groundwater Quality Assessment. Water, 13(9), p.1172. **(I.F.-2.544)**
3. Khare, R., **V. Govind Kumar Villuri**, Chaurasia, D. and Kumari, S., 2021. Measurement of

- transit-oriented development (TOD) using GIS technique: a case study. *Arabian Journal of Geosciences*, 14(10), pp.1-16. **(I.F.-1.327)**
4. Khare, R., **V. Govind Kumar Villuri** and Chaurasia, D., 2021. Urban sustainability assessment: The evaluation of coordinated relationship between BRTS and land use in transit-oriented development mode using DEA model. *Ain Shams Engineering Journal*, 12(1), pp.107-117. **(I.F.-1.949)**
  5. R. K. Singh, A. Soni, S. Kumar, Pasupuleti S., **V. Govind Kumar Villuri**, 2020, “Zonation of flood prone area in integrated framework of hydrodynamic model and ANN”, *Water Supply*, **(I.F.- 0.900)**.
  6. R. K. Singh, **V. Govind Kumar Villuri**, Pasupuleti S., Rajesh N., 2020, “Hydrodynamic modeling for identifying flood vulnerability zones in lower Damodar river of eastern India”, *Ain Shams Engineering Journal*\*, (published online), <https://doi.org/10.1016/j.asej.2020.01.011>. **(I.F.- 1.949)**.
  7. R. K. Singh, M. Pandey, J. H. Pu, Pasupuleti S., **V. Govind Kumar Villuri**, 2020, “Experimental study of clear-water contraction scour”, *Water Supply*, 20 (3), pp.943-952, (published online), <https://doi.org/10.2166/ws.2020.014>. **(I.F.- 0.900)**.
  8. R.K. Singh, **V. Govind Kumar Villuri**, Pasupuleti, S., 2019, “Assessment of parameters and preparation of hydrodynamic model for lower Damodar Basin using geomatic techniques”, *Mausam*, 70, 4, pp. 815-824. DOI: 551.509.331: 556.166. **(I.F. - 0.37)**.
  9. **V. Govind Kumar Villuri**, Pasupuleti, S, Kamal Jain, Ajay Gairola and Ravindra K Singh 2018 “Hydrodynamic simulation of a cloudburst event in Asi Ganga Valley of Indian Himalayan region using MIKE11 and GIS techniques” *MAUSAM Journal*, 69(4), pp.523-534. **(I.F.-0.467)**.
  10. Ashish Soni, Radhakanta Koner and **V. Govind Kumar Villuri**, 2018 “T6-9-Influence of Hyper-parameter In Deep convolution Network using High-resolution satellite data” *Springer. (ICGCE Proceedings-2018)*.
  11. Rupali Khare, **V. Govind Kumar Villuri**, D Chaurasia and Supriya P, 2018 “Evaluating

Transit Oriented Development using a sustainability framework: Case Study of Bhopal” Springer. (ICGCE Proceedings-2018).

12. Shirsendu Layek, Rajat Kumar Singh, **V. Govind Kumar Villuri**, R Koner, Ashish Soni and Rupali Khare, 2018 “T1-6- 3D Reconstruction: An Emerging Prospect for Surveying” Springer, (ICGCE Proceedings-2018).
13. Singha, S., Pasupuleti, S. and **V. Govind Kumar Villuri**., 2017 “An integrated approach for evaluation of groundwater quality in Korba district, Chhattisgarh using Geomatic techniques.” Journal of Environmental Biology, 38(5), pp.865-872. [http://doi.org/ 10.22438/jeb/38/5/MRN-600](http://doi.org/10.22438/jeb/38/5/MRN-600) (I.F.- 0.727).
14. Esha Chakraborty, **V. Govind Kumar Villuri**, and Dheeraj Kumar 2014 “Detection of Hazard Prone Areas in the Upper Himalayan Region in GIS Environment” Int.J.Of Research Engineering and Technology, Vol-3,pp:141-149.
15. **V. Govind Kumar Villuri**, Kamal Jain and Ajay Gairola 2013 “A Study and Simulation of Cloudburst event Over Uttarkashi Region using River Tool and Geomatic Techniques” Int.J. of Soft computing and Engineering (IJSCE), Vol-3, pp-121-126. (I.F-1.25).
16. **V. Govind Kumar Villuri**, K.Venkata Reddy and Deva Pratap “Updation of Cadastral maps using High Resolution Satellite Data” Int.J.of Engineering and Advanced Technology, Vol-2, Issue-4, pp:50-54, 2013.(I.F-0.39).

## **B. In Conference**

- 1) Khare, R., **V. Govind Kumar Villuri**, Chaurasia, D., A Study on Need of Transit Oriented Development in Bhopal, India. Paper presented at Geospatial World Forum, HICC Hyderabad, India on 17-19 January 2018.
- 2) Singh, R.K., **V. Govind Kumar Villuri**. and Pasupuleti, S., 2018. Assessment and study Hydrology of Floods in Lower Damodar Basin using GIS Techniques in International Conference on Sustainable Technologies for Intelligent Water Management, Organized by Organized by DWRDM, IIT Roorkee and Indian Water Resources Society (IWRS) during February 16-19.

- 3) Khare, R., **V. Govind Kumar Villuri**, Chaurasia, D., Kumari, S., Evaluating Transit Oriented Development using a sustainability framework: Case Study of Bhopal. Paper presented at the International Conference on Geomatics in Civil Engineering, IIT-Roorkee, India on 05-06 April 2018.
- 4) Singh, R.K., Pasupuleti, S., and V. Govind Kumar Villuri, 2017 Flood Routing of Lower Damodar using GIS and HEC-RAS” in 7th International Groundwater Conference on Groundwater vision 2030-“water security, challenges & climate change adaptation”, organized by NIH Roorkee in New Delhi during December 11-13.
- 5) Khare, R., **V. Govind Kumar Villuri**, Kumar, D., 2016 Decadal Study of Land Surface Temperature for Urban Heat Island Effect over the National Capital Region, India. Presented at National Symposium on Recent Advances in Remote Sensing and GIS with Special Emphasis on Mountain Ecosystems & Annual Conventions of Indian Society of Remote Sensing & Indian Society of Geomatics organized by IIRS (ISRO), Dehradun on 7-9 December 2016.
- 6) Ajay Kumar, **V. Govind Kumar Villuri** and Dheeraj Kumar 2015 “Global Challenges, policy framework and sustainable development for mining of mineral and fossil energy resources” GCPF 2015-20, NIT Surathkal, 17-18 April 2015.
- 7) Esha Chakraborty, **V. Govind Kumar Villuri**, Dheeraj Kumar “Detection of Hazard Prone Areas in the Upper Himalayan Region in GIS Environment” paper in International Conference on Professional Engineers: Challenges in Disaster Management (ICPECDM 2014), Gitam university, Vishakapatnam, 18-19 December, 2014.
- 8) **V. Govind Kumar Villuri**, Merugu Suresh and Kamal Jain “Development of Sub pixel Data Based on Colorimetric Approach” paper in National Conference on Space Technology for Food & Environmental Security by Indian Society of Remote sensing Conference and Indian Society of Geomatics, New Delhi, Dec 5-7, 2012.
- 9) **V. Govind Kumar Villuri**, P.M.Reddy and Parida “Identification of Accident Black Spots for National Highway Using GIS” paper in International Conference on Emerging Trends in Engineering and Technology at Teerthanker Mahaveer University, Moradabad, April 6-7, 2012.
- 10) **V. Govind Kumar Villuri**, Deva Pratap and K.Venkata Reddy “Updation of Cadastral maps using High Resolution Satellite Data” Paper in Regional Conference on “Empowering Rural India through space Technology” at the ISRS Emporium, Bhopal from 09-11 November, 2011.
- 11) **V. Govind Kumar Villuri**, and Kamal Jain “Monitoring and Analysis of Cloudburst Region using Geomatic Techniques” paper in 13<sup>th</sup> ESRI user conference, New Delhi, Dec 5-6, 2011.

### **Workshop and Seminars:**

- 1) National Workshop on “Prediction and Mitigation of Climate change impacts using space and Agro metrology-based techniques” by WRDM and Indian Institute of Technology, Roorkee, Uttarakhand, India (Nov 5-10,2012)
- 2) National Workshop on “Air Pollution and Climate Change on Agricultural” by Institution of Engineers, Roorkee and Indian Institute of Technology, Roorkee, Uttarakhand, India (April 2012).
- 3) National Conference on “Emerging Trends in Remote sensing and GIS” at Regional Remote sensing service Center, Nagpur, India (May 2008).

### **Membership In Professional Societies:**

S.No	Name of the professional society	Type of Membership	Membership Number
1	Mining Engineers Association of India (MEAI)	Life Member	L-5366
2	Indian Society of Remote sensing (ISRS), Dehradun	Life Member	L - 3837
3	Indian Society of Geomatics (ISG), Ahmedabad	Life Member	L-1498

### **Other Information:**

- Hostel warden (Topaz): from 2017 to 2018.
- Chief Warden (Topaz): From 2018 to till date.
- Co-Coordinator M.Tech. (Geomatics) Programme, Department of Mining Engg.
- Faculty in-charge of Mining Engineering Society (MES) of Department of Mining Engg from 2014 to till date.
- Faculty in-charge of examination, Department of Mining Engineering from 2014 to till date.
- In-charge Geodetic and GPS Laboratory.
- Assistant in-charge Mine Surveying Laboratory.

### **Declaration:**

I do hereby admit that all the information mentioned above is true and best of my knowledge.

### **Annexure-I**

- (i) **Thesis (PhD. Degree) Supervision**
  - **Ongoing**

S.no	Name of the Candidate	Registration No. with Date	Status	Sole or Joint	Supervisors (Guide & CO-Guide)
1	Shisendu Layek	16DR000150 01/8/16	Ongoing	Joint	Dr. Vasanta Govind Kumar Villuri & Dr.Radhakant Koner
2	Rupali Khare	16DR000204 01/8/16	Ongoing	Joint	Dr. Vasanta Govind Kumar Villuri & Dr.Devarshi Chaurasia
3	Ashish Soni	16DR000196 01/8/16	Ongoing	Joint	Dr.Radhakant Koner & Dr. Vasanta Govind Kumar Villuri
4	Ravindra kumar Singh	16DR0048 15/02/15	Ongoing	Joint	Dr.Srinivas Pasupuleti & Dr. Vasanta Govind Kumar Villuri
5	Prabhakar Chowary	18DP000363 12.02.2018	Ongoing	Joint	Dr.Vasanta Govind Kumar Villuri & Dr.Srinivas Pasupuleti

(ii) **Thesis (M.Tech. Degrees) Supervision**

S.No	Name of the Candidate	Year Of completion	Title of Thesis
1	Esha chakraborty	2015	Detection of hazard prone zones in the Upper Himalayan region using GIS and ANN
2	Siddharth Chaudhary	2015	Impact of Climate Change on Hydrological Regime of Yamuna Basin Using GIS based HydrologicalModelling
3	Athosi Dee	2015	Assessment and Prediction of Mine Waste Hazards at Daitari Iron Ore Mines, Odisha – Using Geomatic Techniques
4	Ajay	2015	Impact change of mine fire dynamics on jharia coal field (1992-2014) using remote sensing technique
5	Shisendu layak	2016	Classification of Satellite image by an advanced geomatic technique
6	Abhishek rawat	2016	Assessment of Pollution Extent in Mining Area Using Remote Sensing and GIS Techniques
7	Ashish Soni	2016	Mine environmental monitoring using geomatic techniques
8	Sachin Kumar	2016	Identification of flood prone areas on damodar river using geomatics technique
9	Abhik saha	2017	Landslide Hazard Zonation in Hilly Region
10	Reshu bansal	2017	Non linear separation of classes using kernel based modified possibilistic c-means algorithm

11	Rahul rai	2017	Class based sensor independent indices approach
12	Priyanka Tripathy	2018	Change detection, volumetric mesearments of glaciers and identification of vulnerable areas in teesta basin, indian eastern himalayan region.
13	Parag Shinde	2018	Desertification and land degradation: monitoring, vulnerability assessment and combating plan for jalore district, rajasthan
14	Prathiba A	2018	3d built-up volume change analysis
15	Supriya Kumari	2018	Study of transit-oriented development based on typology by spatial analysis using GIS for Bhopal city.

#### **R& D and Industry sponsored projects**

##### **i) Research funding from external agencies:**

SI. No	Name of the PI	Sponsoring Authority	Topic	Date of Sanction	Sanctioned Amount	Amount Releaseed
1	Dr.Vasanta Govind Kumar Villuri	TEQIP-II,IIT(ISM) Dhanbad	Identification of Flood Prone areas by Preparing Hydrological modeling over Lower Damodar basin_Using HEC-RAS and Geomatic Techniques	25.11.16	02 lac	02 lac
2	Dr.Vasanta Govind Kumar Villuri	FRS(120)/2017-18/ME IIT(ISM) Dhanbad	Identification of Flood Prone areas by Preparing Hydrological modeling over Lower Damodar basin_Using HEC-RAS and Geomatic Techniques	09.5.18	10	10

##### **(ii) Industry Sponsored Professional Development Programs:**

S.NO	Period	Cons.Number(Sponsorin g Authority/Amount)	Topic/Field	Remarks
1	23.09.13-29.11.13	CONS/2341/2012-13(HZL/Rs.20L)	6 weeks course on Advances in Mine Surveying	Co-CI



2	27.10.14-05.12.14	CONS/2723/2014-15	6 weeks course on Advances in Mine Surveying	Co-CI
3	21.01.15 – 15.02.15	CONS/2795/14-15	4 - Weeks Advanced Training on Mining Operations for HZL Young Underground Mining Engineers	Co-CI
4	14.09.15 – 18.09.15	CONS/2978/2015-16(TATASTEEL/Rs.5L)	One-week course on Total Station, GPS and Preparation of Plans and section	Co-CI
5	26.10.15-04.12.15	CONS/3039/2015-16(HZL/Rs.15L)	6 weeks course on Advances in Mine Surveying	Co-CI
6	14.12.15-08.01.16	CONS/3108/2015-16	4 weeks course on “Practical Mine Surveying” for Mine Surveyors and Apprentice in Mine Surveying	Co-CI
7	26.04.16-28.04.16	CONS/3224/2016-17(Rs.3L)	3-days Professional Development Programme on Application of Modern Tools and Techniques for Mine Surveying	Co-CI
8	03.07.17-12.08.17	CONS/3496/2017-18	6 weeks course on Advances in Mine Surveying	Co-CI

(iii) **Industry Sponsored consultancy projects:**

S.N O	Sponsoring Authority	Topic/Field	Date of Sanction tion & Duration	Total Value (excluding taxes)	Completed/ ongoing	Remar k
1	SAIL ISP	Land surveying & Contouring within leased hold area of sitanala coal block of chasnalla collery,SAIL	21.1.14	662,374	Completed	Co-CI
2		Gyroscopic survey for alignment survey in the tunnel using gyromat 3000	27.1.14	740,912	Completed	Co-CI
3	ESSAR, Durgapur	Subsidence monitoring at Essar Raniganj CBM Block	21.8.14	1,296,000	Completed	Co-CI
4	West Singhbhum	DGPS survey of Demarked boundary pillars vikay-II, Iron ore mine, M/s Usha martin Ltd, Barajamda, West singhbhum	26.11.14	378,965	Completed	Co-CI

5	Adani Enterprise Ltd	DGPS survey of Demarked boundary pillars of lease hold area and forest area within the existing lease hold area of Jitpur coal block	09.9.2015	1,709,205	Completed	Co-CI
6	SAIL	Geo-referencing of cadastral map of sitanala coal block of Chasnalla colliery,SAIL	31.12.15	198,000	Completed	Co-CI
7	SAIL	Determination of stripping ratio of salanpur 'C' Quarry of Ramnagore Colliery	12.5.16	400,000	Completed	Co-CI
8	SAIL	Geo-referencing of cadastral map of Chasnala, Tasra and Jitpur coal block,SAIL	12.5.16	594,000	Completed	Co-CI
9	SAIL ISP	Determination of stripping ratio of Parbatpur Quarry	12.5.16	200,000	Completed	Co-CI
10	HCL	Identification & demarcation of boundary under surda mining lease area by cadastral survey	23.6.16	2,400,000	Completed	Co-CI
11	SAIL	DGPS survey of intermediate pillars for georeferencing of cadastral map and diverted area.	03.7.16	189,000	Completed	Co-CI
12	TATA STEEL	Identification & demarcation of Sand mining lease area,Jharia Division by DGPS survey	28.10.16	3600000	ongoing	Co-CI
13	SAIL	Georeferencing of land use map and Preparation of Shape files in GIS	01.12.16	450,000	ongoing	Co-CI
14	SAIL	DGPS Survey of demarked lease boundary pillars Tulsidamar dolomite mines	03.12.16	899,333	ongoing	Co-CI
15	Khanak Stone mine	Periodic Volumetric measurement of material being extracted at khanak stone mines	07.1.17	494,972	ongoing	Co-CI
16	SAIL	Georeferencing of plans showing lease boundary, block boundary and pit boundary of Tasra and chasnalla	23.05.17	250000	ongoing	CI

17	HCL,Surda	Identification & demarcation of boundary under Kendadih mining lease area by cadastral survey	09.06.17	1,304,348	ongoing	Co-CI
18	HCL,Rakha	Identification & demarcation of boundary under Rakha mining lease area by cadastral survey	09.06.17	2,445,652	ongoing	Co-CI
19	TVNL	georefencing of cadstral map showing lease hold area and forest diversion area of Rajbar coal mines	12.6.17	980,000	ongoing	Co-CI
20	SAIL	Land Use/Land Cover Classisfication of ore Mines Kiruburu Meghataburu, Manoharpur, Gua, Kalta and Bolani mines	30.05.18	10,00,000	ongoing	CI