# RESUME

## EDUCATION:

## Master in Technology - Environmental Geomatics (2013 – 2015)

Major Subjects: Remote sensing, GIS, Photogrammetry, GNSS, GPS, EIA. Geodesy, Ecology.

University: Jawaharlal Nehru Technological University, Hyderabad

Bachelor in Technology -Electrical and Electronics Engineering (2009 – 2013)

University: Jawaharlal Nehru Technological University, Hyderabad

**September 2014 – August 2015: Dissertation work for MTech (Environmental Geomatics)** is carried out at National Remote Sensing Centre. Under the guidance of Dr. C. Sudhakar Reddy.

Title: Conservation prioritization of forest ecosystems in Andhra Pradesh, India using Geospatial techniques

#### TECHNICAL SKILLS:

Software Knowledge	: Arc GIS (10.2), ENVI, ERDAS Imagine 2016, Matlab R2017a, Geomatica, QGIS
Computer Languages	: C, C++, Python, GDAL libraries, Postgre SQL

# EXPERIENCE:

**November 2015 – March 2017: Project Assistant Level – III,** CSIR- National Geophysical Research Institute (NGRI), Tsunami modelling group. Project Title: Tsunami vulnerability assessment integrating numerical modeling and Geospatial technologies

*Nature of work:* Requisition of satellite data, preprocessing of data, database creation, ancillary data collection, inundation results are obtained using TUNAMI N2 model, assigning weights to the parameters using analytical hierarchy process, generating vulnerability maps using spatial analyst tool in GIS.

*June 2017 – March 2018: Project Scientist,* Central Coffee Research Institute - Indian Space Research Organization collaborative project GEO-CUP, India. Project Title: National Coffee Inventory using high resolution remote sensing data.

*Nature of work:* Requisition of satellite data, database creation, preprocessing of remote sensing data, GPS based ground truth collection, classification and interpretation of the remote sensing data and generating coffee area map for India.

# JOURNAL PUBLICATIONS:

- 1. Jakkula, M., Guruhappa, H., Manaswini, G., & Srivastava, K. "Tsunami forces acting on ocean structures: A synthetic study". Journal of Indian Geophysical Union, 21(6), 482-489 (2017).
- 2. Reddy, C.S., Jha, C.S., **Manaswini, G.,** Alekhya, V.V.L.P., Vazeed Pasha, S., Satish, K.V., Diwakar, P. G., & Dadhwal V,K. "Nationwide assessment of forest burnt area in India using Resourcesat-2 AWIFS data". *Curr. Sci (2017).*
- 3. Reddy, C.S., **Manaswini, G.,** Jha, C.S., Diwakar, P.G., & Dadhwal, V.K. "Development of national database on long-term deforestation in Sri Lanka". *Journal of the Indian Society of Remote Sensing*, 1-12 (2016).
- 4. Reddy, C.S., **Manaswini, G.,** Satish, K.V., Sonali Singh., Jha, C.S., Dadhwal V,K. "Conservation priorities of forest ecosystems: Evaluation of deforestation and degradation hotspots using geospatial techniques". *Ecological Engineering volume 91 (2016):333–342*
- 5. **Manaswini, G.,** and Reddy, C,S., "Geospatial monitoring and prioritization of forest fire incidences in Andhra Pradesh, India". *Environmental monitoring and assessment 187.10 (2015):1-12*

# CONFERENCES

- 1. **Manaswini, G.,** Kirti, Srivastava. "Integrating Numerical modeling with GIS technologies for assessment of tsunami inundation in Car and Great Nicobar islands". *Presented at International Conference on Computational Technologies, held at Jaipur. 26-27 March, 2016.*
- 2. **Manaswini, G.,** Sudhakar Reddy, C., K.R.L Saranya., and C.S Jha. "Threat Evaluation of forest cover change in Andhra Pradesh, India using historical satellite data and geospatial techniques". *Presented at National seminar on Climate Change Ecosystems Environment and Society, held at Andhra University, Visakhapatnam, Andhra Pradesh.* 21-22 September, 2015.
- 3. Manaswini, G., and Sudhakar Reddy, C. "Remote sensing based monitoring of forest fires in Andhra Pradesh". Presented at National Climate change Conferences, held at Indian Institute of Science, Bangalore. 2-3 July, 2015.

## **PROFESSIONAL ACTIVITIES:**

- Contributed to teaching student participants (12-14 years old) at CSIR-National Geophysical Research Institute (January 2015 March 2017) about tsunami generation, propagation, early warning systems, and vulnerability.
- During TEQIP Assistantship in master's education (November 2013 September 2014), I worked preparing tutorials and assisted in research by conducting literature reviews.

# **VOLUNTEER ACTIVITIES:**

- Volunteered during a semester break for an NGO, to support and improve the livelihoods of women farmers.
- Was an active member of both the National Green Corps (NGC) and the National Cadet Corps (NCC) in high school and college, having participated in social service activities.