

## **RAYMOND JESS G. GOLIAT**

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### **EDUCATIONAL BACKGROUND:**

2016 – PRESENT      Masters of Science in Meteorology (31 units)  
**University of the Philippines – Diliman (UPD)**

2008 – 2013      Bachelor of Science in Mathematics  
**University of the Philippines – Diliman (UPD)**

### **RESEARCH INTERESTS:**

Climatology, Climate Change, Climate Impacts and Adaptation, Agrometeorology, Remote Sensing / Geographic Information Systems and its Applications, Regional Climate Modeling.

### **TECHNICAL AND SPECIALIZED SKILLS:**

- Knowledgeable in R and Matlab (Visualization/Analysis of large dataset)
- Knowledgeable in ENVI, QGIS, ArcGIS (Processing/Visualization/Analysis of satellite data)
- Knowledgeable in Basic Regional Climate Modelling
- Experienced in Environmental monitoring and Field validation of remotely sensed satellite data (air, water, and land).

### **EMPLOYMENT:**

MAR 2021 – PRESENT **JUNIOR RESEARCH ASSOCIATE**

JUN 2020 – DEC 2020 **PROJECT ASSISTANT III**

JAN 2020 – MAR 2020 **GRADUATE ASSISTANT**

MAY 2018 – DEC 2020 **SCIENCE RESEARCH SPECIALIST II**

JAN 2017 – FEB 2018 **SENIOR RESEARCH ASSISTANT**

OCT 2016 – DEC 2016 **SCIENCE RESEARCH SPECIALIST I**

APR 2016 – SEP 2016 **SENIOR RESEARCH ASSISTANT**

SEP 2015 – MAR 2016 **SCIENCE RESEARCH SPECIALIST I**

Institute of Environmental Science and Meteorology (IESM)

University of the Philippines – Diliman (UPD)

### **PROJECTS INVOLVED:**

- Jun 2020 – Dec 2020: Perez G.J., Cansino, P.J., Pangasinan, J., Faelga, R.A., Macapagal, E.M., **Goliat, R.J.**, *Project 5 Advanced Satellite Development and Know-How Transfer for the Philippines* (Program title: Sustained Support for Local Space Technology and Applications Mastery, Innovation, and Advancement) STAMINA4Space. UP-IESM  
Project Assistant III
  - Performed administrative tasks for the implementation of the project.

- May 2018 – Mar 2020: Perez, G.J., Enricuso, O., **Goliat, R.J.**, Valete, M.A., Veloria, A., Racoma, P.R., Labisores, R., Ang, P.D., Manauis, K., Comiso, J.: *Drought and Crop Assessment and Forecasting Phase 2*. (Program title: Smarter Approaches to Reinvigorate Agriculture as an Industry in the Philippines Phase 2) SARAI2. UP-IESM

Science Research Specialist II

- Performed technical and administrative tasks for the implementation of the project.
- Performed Ground validation of satellite derived environmental parameters in improving Agricultural Drought forecast and responses using different field sensors.
- Conducted lectures and trainings on Basic Remote Sensing and GIS, Seasonal Rainfall Patterns, Agricultural Drought, and Operation of different field sensors.
- Prepared Technical Reports, Financial Reports and other administrative documents.
- Jan 2017 – Feb 2018: David, L., Perez, G.J., Grieta, C.K., **Goliat, R.J.**, Pangasinan, J.: *Philippine Coral Reef and Mangrove Remote Sensing* (PhilCoMaRS). UP-IESM

Senior Research Assistant

- Performed coral mapping in selected coastal areas over the Philippines by processing multi-spectral images (Landsat) to detect coral reefs using ENVI and ArcGIS.
- Oct 2016 – Dec 2016: Perez, G.J., Namuco, S., Castro, E., Felicio, F.M., Felix, M.J., Leonardo, E.M., Fulgencio, L.A., Macapagal, M., Madalipay, J., **Goliat, R.J.**: *Project 5 Remote Sensing Products Development* (Program title: Development of Philippine Scientific Earth Observation Microsatellite) PHL-MICROSAT. UP-IESM

Senior Research Specialist I

- Ground validation of satellite derived environmental parameters using different field sensors, both water and land covers.
- Apr 2016 – Sep 2016: David, L., Perez, G.J., Panganiban, M.M., Lopez, R., Grieta, C.K., **Goliat, R.J.**, Pangasinan, J.: *Project 9 Remote Sensing of Coastal Habitats and Stressors* (Program title: Coral Reef Visualization and Assessment Program) CoRVA 9. UP-IESM

Senior Research Assistant

- Performed seagrass detection in selected NIPAS areas by processing Landsat multispectral images from different periods using ENVI and ArcGIS.
- Conducted training on seagrass detection
- Sep 2015 – Mar 2016: Perez, G.J., Macapagal, E.M., Macapagal, M., Olivares, R., Comiso, J., **Goliat, R.J.**: *Drought and Crop Assessment and Forecasting* (DCAF). UP-IESM, PAGASA, and DA-BSWM

Science Research Specialist I

- Performed both administrative and technical tasks.
- Conducted drought reconnaissance and validations in different areas over the Philippines during the 2015-2016 El Niño using ground sensors and key informant interviews.
- Prepared Financial Reports and other administrative documents

**CURRENT WORKING RESEARCH:**

- **Goliat, R.J.**, Perez, G.J. *Evaluating the Response of Rainfall Patterns over the Philippines to Sea Surface Temperature of Its Surrounding Basins Using CHIRPS and OISSTv2*. Investigation on the influence of SST from the South China Sea, Philippine Sea, Sulu Sea, and Celebes Sea to

the rainfall variability over the Philippines by analyzing 35 years of CHIRPS and OISSTv2 data.

#### **PRESENTATIONS AND WORKSHOPS ATTENDED:**

- Understanding Lightning and Thunderstorms (ULAT) Project Online Training, Quezon City, Philippines. June 2021 (Participant)
- *'Relationship of Philippine Rainfall with SST of surrounding Basins'*, 8<sup>th</sup> Annual Conference on Environmental Science, MSU Taw-Tawi, Philippines. September 2019 (Oral Presentation)
- PAGASA-World Food Program Training Workshop on Building Capacities of PAGASA Technical Staff to Provide Better Climate Monitoring and Prediction Services, Marco Polo Hotel, Meralco Avenue, Pasig City, Philippines. November 28 – December 7, 2018 (Participant)
- Land Cover/Land Use Changes (LC/LUC) and Impacts on Environment in South/Southeast Asia – International Regional Science Meeting, Richmond Hotel, Eastwood, Libis, Quezon City, Philippines. May 2018 (Participant)
- NASA Land Cover / Land Use Change (LC/LUC) SARI Advanced Training in Remote Sensing and Geospatial Technologies, Institute of Environmental Science and Meteorology, University of the Philippines, Diliman, Quezon City, Philippines. June 2018 (Participant)
- *'Indicators of Ocean Moisture Contribution on Terrestrial Rainfall: Application of Satellite Meteorology'*, Remote Sensing on Meteorology and Agriculture: Applications and Research Opportunities, Bicol University, Legazpi City, Albay. February 2019 (Resource Speaker)
- PCI Geomatics Training: Introduction to Geomatics, Institute of Environmental Science and Meteorology, University of the Philippines, Diliman, Quezon City. November 2016 (Participant)
- The 23<sup>rd</sup> Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-23): Building a Future through Space Science, Technology and Innovation, Sofitel Philippine Plaza Manila, Philippines. November 2016 (Participant)
- Introduction to ENVI Analytics', Geodata Systems Technologies, Inc., Emerald Ave., Ortigas Center, Pasig City Philippines. August 2016 (Participant)
- ASD Fieldspec 4 equipment and application training on Remote Sensing and Field Spectrometry, Institute of Environmental Science and Meteorology, University of the Philippines, Diliman, Quezon City, Philippines. March 2016 (Participant)
- The 36<sup>th</sup> Asian Conference on Remote Sensing, Ortigas Center, Pasig City, Philippines. October 2015 (Participant)

#### **FIELDWORK EXPERIENCE:**

- Drought Reconnaissance and Ground Validations in several provinces during 2015-2016 El Nino Event.
  - Pangasinan. Duration: Dec 16 – 18, 2015
  - Negros Occidental. Duration: January 22 – 29, 2016
  - Agusan del Norte. Duration: February 19 – 24, 2016
  - Quirino. Duration: March 7 – 9, 2016
- Calibration and Validation of Liquid Crystal Tunable Filter (LCTF) Camera Campaign. Gerona and Ramos, Tarlac. Duration: March 28 – April 3, 2016

- Ground Validations on impacts of Tropical Cyclone Lawin (Haima) on selected areas over Cagayan and Isabela. Duration: December 2 – 8, 2016.
- Taal Lake Field Validations, Taal Lake, Batangas. Duration: December 10 – 15, 2016
- Laguna Lake Field Validations, Laguna de Bae, Calamba, Laguna. Duration: March 9 – 12, 2018
- Drought Reconnaissance and Ground Validations for the improvement of Drought Monitoring and Forecasting over different provinces.
  - Bicol Duration: February 1-5, 2019
  - Ilocos Norte Duration: Feb 18 – 24, 2020
  - Laguna Duration: April 7 – 11, 2019
  - Isabela Duration: September 26 – 29, 2019
  - Mindoro Duration: May 14 – 17, 2019
  - Nueva Ecija Duration: February 18 – 24, 2020

#### **REFERENCES:**

GAY JANE P. PEREZ, Ph.D.

Associate Professor,  
Institute of Environmental Science & Meteorology  
University of the Philippines – Diliman  
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OLIVIA C. CABRERA, Ph.D.

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LEMNUEL V. ARAGONES, Ph.D.

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