




# CRIZZIA MIELLE DE CASTRO

+639176254141   
cmdecastro@up.edu.ph   
<https://github.com/cmdecastro> 



## RESEARCH INTERESTS

climate modelling, air pollution meteorology, remote sensing, satellite images



## EDUCATION

**MS Meteorology | University of the Philippines Diliman**

AUGUST 2020 – PRESENT

**BS Applied Physics (Instrumentation) | University of the Philippines Diliman**

AUGUST 2015 – JULY 2020

*Magna cum laude*

Adviser: May T. Lim, PhD

Thesis title: Extracting Philippine voting patterns through hyperspectral unmixing

**High School Diploma | Philippine Science High School – Main Campus**

JUNE 2011 – MARCH 2015

*High Honors*



## ESSENTIAL SKILLS

### Programming

Python (expert), MATLAB (intermediate), MySQL (beginner), R (beginner), C++ (beginner),  
Java (beginner), HTML (beginner)

### Research

More than five years' experience in scientific research, writing, and communication

### Others

LaTeX (expert), QGIS (beginner)



## RESEARCH AND DEVELOPMENT INVOLVEMENT

**Student Researcher | Data Analytics for Research and Education (DARE) under CHED-PCARI**

2018 - 2020

**Student Researcher | Complex Systems Team, Instrumentation Physics**

Laboratory

2018 – 2020



## WORKSHOPS AND CONFERENCES

### International

**Malaysia International Young Inventors Olympiad | Penang, Malaysia**

2015

Our research titled *Creation of an Alternative Industrial Filtration Device Utilizing Banana and Orange Peels* won a *Gold Award* and one of the ten *Special Jury Award*.

### Local

**38<sup>th</sup> Samahang Pisika ng Pilipinas Physics Conference | Zoom teleconference**

OCTOBER 2020

Short Presentation



## PUBLICATIONS

1. CMM de Castro and MT Lim, Extracting voting patterns across three Philippine senate elections using hyperspectral unmixing, *Proceedings of the Samahang Pisika ng Pilipinas* **38**, SPP-2020-2A-06 (2020). URL: [proceedings.spp-online.org/article/view/SPP-2020-2A-06](https://proceedings.spp-online.org/article/view/SPP-2020-2A-06).
2. CMM de Castro and MT Lim, Determining senatorial voting archetypes through hyperspectral unmixing, *Proceedings of the Samahang Pisika ng Pilipinas* **37**, SPP-2019-PB-32 (2019). URL: [proceedings.spp-online.org/article/view/SPP-2019-PB-32](https://proceedings.spp-online.org/article/view/SPP-2019-PB-32).



## ORGANIZATION ACTIVITIES

### UP Astronomical Society | University of the Philippines (UP) Diliman

2016 – PRESENT

- Active member
  - Education and Research Cluster (Committee) member
  - Observation and Instrumentation Cluster (Committee) member
  - UP Alternative Classroom Learning Experience head organizer
  - Collision: An Astronomy Quiz Show 2018 head organizer
- National Astronomy Week 2018 Logistics Director
- Education and Research Cluster Coordinator (2018-2019)
- International Observe the Moon Night Celebration 2020 Logistics Director

### UP Environmental Science & Meteorology Society | University of the Philippines (UP)

Diliman

2020 – PRESENT

Member

### UP Data Science Society | University of the Philippines (UP) Diliman

2021 – PRESENT

Core Team



## SCHOLARSHIPS

### Undergraduate Merit Scholarship | Department of Science and Technology - Science Education Institute

2015-2020

### Accelerated Science and Technology Human Resource Development Program | Department of Science and Technology - Science Education Institute

2020-PRESENT



## AWARDS AND RECOGNITIONS

### Youth Excellence in Science Award | Department of Science and Technology - Science Education Institute

2016

### University/College Scholar | University of the Philippines Diliman

2015-2020