

# Gerard Francis M. Ortega

gfmortega@gmail.com • gfmortega@hotmail.com • (+63)9274676990

## Experience

### National Olympiad for Informatics Philippines (NOI.PH) - Scientific Committee

*An annual algorithmic programming competition for Filipino High Schoolers*

- **Problem Setter and Tester (2018-present)**

Creates algorithmic programming problems for NOI.PH, including strong test data for a variety of subtasks.  
Tests the strength and rigor of other problems' data against solutions of different levels of efficiency and correctness.  
Experience with using **Git** for collaborating with other developers in creating test data.  
Sample problems: [bit.ly/LotsOfCookiesNOI](https://bit.ly/LotsOfCookiesNOI) and [bit.ly/SenoritaNOI](https://bit.ly/SenoritaNOI)

- **Trainer (2018-present)**

Leads online lessons in mathematics and programming to finalists who opt to join the NOI.PH training.  
Creates comprehensive, textbook-style training modules in LaTeX for use by NOI.PH in these online lessons.  
Sample module (on Combinatorial Game Theory): [bit.ly/NOI2019GameTheory](https://bit.ly/NOI2019GameTheory)

### Ateneo Programming Varsity (AdMU ProgVar)

*Represents Ateneo in local and international algorithmic programming contests*

- **Member (2017-present)**

Undergoes weekly rigorous training in data structures and algorithms

## Programming Contests

**ICPC Manila Regionals 2017**

Top 8 out of 35 teams

**UP ACM Algolympics 2018**

1st out of 29 teams

**ICPC Singapore Regionals 2018**

Top 17 out of 50 finalist teams  
158 teams in the preliminary

**Samsung Algo Challenge 2019**

6th out of the Top 10 finalists,  
157 participants in the eliminations

**UP ACM Algolympics 2019**

2nd out of 30 teams

**ICPC Malaysia Regionals 2019**

Top 10 out of 33 teams  
Highest Ranking Local Team

**ICPC Manila Regionals 2019**

Top 12 out of 46 teams  
Highest Ranking Local Team

**UP ACM Algolympics 2020**

1st out of 20 finalist teams  
82 teams in the eliminations

## Education

**Aug 2017 - Present**

**Ateneo de Manila University**

*Bachelor of Science in Mathematics*  
Cumulative QPI: 3.93 out of 4 (First Honors)

## Programming Projects

Repository of old projects (including Java desktop apps and Python scrapers) at [github.com/gfmortega?tab=repositories](https://github.com/gfmortega?tab=repositories).

Experience with **Python** libraries for collecting data from Twitter, Reddit, etc. APIs

Experience with **Python** libraries for statistics and numerical analysis

## Skills and Interests

### Programming Languages

- C++
- Java
- Python
- MatLab and SciLab

### Mathematics Courses Taken

- Graph Theory
- Number Theory
- Abstract Algebra
- Linear Algebra
- Scientific Computing
- Probability Theory