# Orlando Ferrari

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### **Summary**

A Fresh Mathematics Graduate (B.Math.) from Gadjah Mada University, achieving a perfect GPA of 4.0/4.0. Currently has research interests in analysis, particularly in **topology & metric spaces**, **differential equations**, **and functional analysis**. Furthermore, has over 3.5 years of experience in mathematics education as a tutor.

### **Education**

### Gadjah Mada University, S.Mat. (B.Math.)

Yogyakarta, Indonesia, Aug 2021 – Jan 2025

- **GPA**: 4.0/4.0
- Thesis Supervisor: Hadrian Andradi
- Thesis Topic: Essential and Density Topologies on Continuous Domains. [Abstract]

### **Publications**

### **Research Papers:**

• Hatmakelana, C.P.L.J., Diyaldin, F.S., Ferrari, O., Wahyuni, S., 2023, *Almost von Neumann Rings and Its Properties*. Submitted.

#### **Books:**

• Surodjo, B., Wahyuni, S., Sutopo, Wijayanti, I.E., Susanti, Y., Sutjijana, A., Ferrari, O., 2024, *Logika Matematika dan Himpunan (Mathematical Logic and Set Theory*). Deepublish. (Written in Indonesian)

# **University Teaching Experiences**

### Class Tutor, Gadjah Mada University

Aug 2022 - Jun 2024

• Selected courses: MMM-2116 Introduction to Analysis I (2024), MMM-2201 Introduction to Algebraic Structure II (2023), MMM-1207 Discrete Mathematics (2023), MMM-1102 Calculus II (2023), MMM-1101 Calculus I (2022).

### Drop-in Centre (Ruang METRIK) Tutor, Gadjah Mada University

Aug 2024 – Dec 2024

• Provided tutoring and consultation services for nearly all compulsory courses in the Undergraduate Mathematics Program at Universitas Gadjah Mada, spanning first-year to third-year courses during the first semester of the Academic Year 2024/2025.

# **Research Experiences**

### Research Assistant, Gadjah Mada University

Feb 2023 - Nov 2023

Participated in the Algebra Assistant Research Program at Gadjah Mada University under the supervision of Prof. Dr. Sri Wahyuni and Prof. Dr. Indah Emilia Wijayanti. The outcome of this program is the paper *Almost von Neumann Rings and Its Properties*.

# **Professional Work Experiences**

# Freelance Math Tutor, Self-affiliated

Aug 2021 - present

• Delivered tutorials and consultations, both privately and through contractual agreements with educational institutions, on a wide range of mathematical topics, covering school-level mathematics, olympiad preparation, and university-level mathematics.

### Math Olympiad Tutor,

Sep 2023 - Dec 2024

Star Generation (PT Generasi Bintang Cemerlang), Tangerang

• Instructed students across various grade levels, from elementary to junior high school, in olympiad-level mathematics **in English**, specifically preparing them for national and international mathematics competitions.

### Head of Department of Competitions,

Sep 2024 - Nov 2024

Star Generation (PT Generasi Bintang Cemerlang), Tangerang

• Led a team of over 15 tutors across various competitive fields and successfully managed two significant projects that provided support to more than 200 students within a one-month period.

### Problem Selection Committee, LMNas UGM

Jan 2022 - Dec 2024

Developed and curated problems utilized in LMNas 33, 34, and 35, a competition that has attracted over 12,000
participants across three years, spanning both Middle School and High School levels. This competition is one of
the largest mathematics contests conducted in Indonesia.

Math Doubt Solver, Zenius (PT Zenius Education), South Jakarta

May 2022 - Jul 2022

• Developed solutions to inquiries posed by junior and senior high school students through ZenBot, employing a system similar to that of Chegg, Course Hero, and related platforms.

### **Selected Awards**

- Outstanding Student Award, awarding night for outstanding achievements at Gadjah Mada University. (2023)
- Second Prize, International Mathematics Competition for University Students, Blagoevgrad, Bulgaria. (2023)
- Gold Medal & Absolute Winner, Olimpiade Nasional Matematika & Ilmu Pengetahuan Alam [National Olympiad of Mathematics and Natural Sciences], Bandung, Indonesia. (2023)
- First Place, Mathematics ITS Calculus Competition, Surabaya, Indonesia. (2023)
- Gold Medal & Best Presenter, Indonesia Mathematical Analysis Community Calculus Paper Competition, Solo, Indonesia. (2023)
- Bronze Medal, Olimpiade Nasional Matematika & Ilmu Pengetahuan Alam [National Olympiad of Mathematics and Natural Sciences], Malang, Indonesia. (2022)

# **Other Mathematical Projects and Outreaches**

- Math Assistant Jury in the National Science Olympiad, the largest science competition for senior high school students in Indonesia. (Aug 2024)
- Instructed students in recreational mathematics and developed a straightforward mathematical model of composting aimed at waste education in the rural villages of Sleman, as part of the UGM Community Service Program. (Jul 2024 Aug 2024)
- **Technical Assistant** for the Department of Mathematics UGM outreach program "Use of Information Technology to Support Mathematics Learning at Junior High School Level for Junior High School Mathematics Teachers throughout Kulon Progo Regency". (Aug 2022)
- Composed the unofficial solution to the National Olympiad of Mathematics and Natural Sciences 2024.
- Composed the tryhard concise note for the National Olympiad of Mathematics and Natural Sciences for the UGM contingent in the algebraic structure subfield of the competition.

### Other Activities

- Chairman, ONMIPA Community of Gadjah Mada University. (2024)
- Coordinator of Problem Selection Committee, LMNas UGM. (2023-2024)
- Academic Department Staff, Students' Association of Undergraduate Mathematics UGM. (2022)

# **Public Appearances**

- Guest Speaker, LMNas UGM Talkshow for parents and teachers. (2024)
- Guest Speaker, Math UGM Podcast in YouTube. (2024)
- Guest Speaker, "Graphing New Beginning" Talkshow hosted by Math UGM for freshmen. (2023)
- Featured in Article, Gadjah Mada University. (2025)
- Featured in Article, Ministry of Education and Culture. (2024)

# Other Skills

Languages: Bahasa Indonesia (native); English (IELTS 7.5 Overall [C1 Advanced]); Japanese (novice).

Technical Skills: LTEX, Microsoft Office, Python.