# Mahmoud Khaled

Teaching Assistant

6 Melrose Road, Muizenberg Cape Town, South Africa.  $\square$  +27 72 790 4408

☑ mahmooudkh33@gmail.com

sites.google.com/view/mahmoud-khaled-/

## Personal information

Date of birth: 22 Dec. 1997
Citizenship: Egyptian
Status: Celibate

#### Education

Sep.2023 - Jul.2024 M.Sc.(Pursuing), University of Cape Town, AIMS, Cape Town, South Africa

(Fully Funded Scholarship)

Sep.2022 - May 2023 Pre M.Sc., Helwan University, Helwan

2016 - 2020 Bachelor of Science in Mathematics, Helwan University, Helwan

Total GPA =3.3/4. Graduated with "very Good" (82.47%).

Graduation \ Final year project: Interval Analysis.

## Teaching and Mentoring Experience

Oct. 2022 - Aug.2023 **Teaching Assistant**, *El-Gazeera Higher Institute for Engineering and Technology*, Cairo.

Sep. 2020 - Now Freelance Mathematics lecturer, Online teaching.

Sep. 2020 - Apr. 2021 **Teaching Assistant**, Mathematics Dep., Faculty of Science, Helwan University,

Helwan.

### Seminars & Schools

25-27 Oct. 2023 Spring School "On Symmetries of Differential & Difference Equations and Their Applications", Stellenbosch, South Africa

31 Aug. 2023 Quadratic Forms, Rings and Codes, Laboratoire de Mathématiques de Lens, France

24-28 Jul. 2023 Five days faculty development program on 'Data Analysis using Advanced Com-

putational techniques', Department of Statistics and Department of Mathematics,

Amity University Kolkata, North India

27-28 Jan. 2023 Categories, Rings and Modules, a conference in honor of Alberto Facchini, Online

10-21 Dec. 2022 Rings, Algebras, and Category Towards Coding and Computer Algebras, CIMPA

school, Helwan University

24 Jul. 2019 Topology and its Applications, Helwan University.

## Puplication & Posters

Mar. 2024 Presented a research poster on 'Mathematical Modelling and Game Strategy for Quoridor' at Siyakhula event. Developed and implemented advanced game strategy algorithms in collaboration with international experts, showcasing proficiency in problem-solving and computational skills.

#### Awards & Achievements

- Apr. 2024 I have been selected as a student member of the European Mathematical Society.
- Apr. 2024 Awarded a fully-funded internship at HGS MathComp, Heidelberg University, Germany. Conducted a 5-week research project in mathematical modelling and game strategy implementation for the board game Quoridor.
- Oct. 2023 Mastercard Foundation Scholar at AIMS: Empowering Africa's Future through Education, Leadership, and Community Impact - Cape Town, South Africa
- Aug. 2023 Accepted to study Master's degree at University of Cape Town Cape Town, South Africa
- Jun. 2023 Selected for a fully fund scholarship to study Master's degree at University of Cape Town - Cape Town, South Africa
- Jun. 2023 Accepted to study Master 2 Indifférencié Modélisation et Méthodes Mathématiques en Economie et Finance, at Université Paris 1 Panthéon-Sorbonne - Paris, France
- May. 2023 Selected for the first stage in a fully fund scholarship from the French embassy in Egypt
- May. 2023 Selected for a fully fund scholarship to study Master's degree at Università della Calabria - Calabria, Italy
- Apr. 2023 Accepted to study Master 2 MPA at Université Côte d'Azur Nice, France
- Dec. 2020 Seventh Place in the Ideal Student Competition at Helwan University.
- Dec. 2020 Ideal Student Certificate, Faculty of Science.

LATEX, C++, Python, R software, Microsoft Office, GeoGebra, plotly, Canva, Emaze,

Languages: Arabic(native), English (near-native), French (Basic).

## Volunteer & Social works

- Mar. 2024 As a Mastercard Foundation Scholar, actively participated in community service initiatives, dedicating hours to social work and volunteering efforts. Engaged in educational tutoring at Muizenberg High and contributed to significant events like Siyakhula and the CIMPA Algebra Winter School, demonstrating a commitment to educational support and community development.
- Mar. 2024 Volunteered at Siyakhula, an event by AIMS, to boost Africa's mathematical sciences. Coordinated international workshops, talks, and showcases, fostering global scientific collaboration.
- Participated as a volunteer at the CIMPA Algebra Winter School, facilitating Dec. 2022 academic exchanges and supporting the organization of workshops focused on advancing algebraic knowledge and research collaboration among international scholars.

#### References

#### Dr Karin-Therese Howell

Academic Director, African Institute for Mathematical Science, South Africa.

#### Prof. Susan Eldeken

e-mail:Sfdeken@science.helwan.edu.eg

e-mail: howell@aims.ac.za

Mathematics Department, Helwan University, Cairo, Egypt.