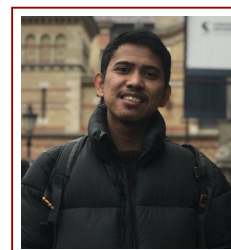# Muhammad Imran

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Education

2020–present	**PhD Mathematics**, *Budapest University of Technology and Economics* Thesis: *Algebraic methods in quantum computing and information processing*
2017–2019	**MSc Mathematics**, *Leiden University* Thesis: Gröbner bases for decoding linear codes
2012–2016	**BSc Mathematics**, *Hasanuddin University* Thesis: System of linear equations over max-plus algebra

Research Schools

2022	**CIMPA School**, *Summer School on Applied Arithmetic at Nesin* `http://susaan.inria.fr`
2020	**CIMPA School**, *Research School on Group Actions in Arithmetic and Geometry* `http://www.rnta.eu/Yogyakarta2020/`
2015	**SEAMS School**, *SEAMS School on Coding and Graph Theory*

Awards

2020–2024	**Stipendium Hungaricum Scholarship**, *The Government of Hungary* Scholarship for pursing doctoral degree in Budapest University of Technology and Economics, Hungary
2017–2019	**LPDP Scholarship**, *The Government of Indonesia* Scholarship for pursing master degree in Leiden University, Netherlands
2014–2016	**Rumah Kepemimpinan Scholarship**, *Yayasan Nurul Fikri* Leadership and Managerial Training Scholarship
2012–2016	**Bidikmisi Scholarship**, *The Government of Indonesia* Scholarship for pursing bachelor degree in Hasanuddin University, Indonesia

Publications

1. M. Imran, & G. Ivanyos. An exact quantum hidden subgroup algorithm and applications to solvable groups. Quantum Inf. Comput., 22(9-10):771–790, 2022.
2. M. Imran. An exact version of Shor's order finding algorithm and its applications. Technical Report 2205.04240 [quant-ph], arXiv, 2022.

Teaching

1. **Informatics 2** : Python programming language. (2020/2021)
2. **Introduction to Algebra 1** : Basic group theory, and linear algebra. (2021/2022)
3. **Introduction to Algebra 2** : Advanced linear algebra and its applications. (2021/2022)

References

1. **Research Advisor at Institute for Computer Science and Control**
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