



DEPARTMENT OF
NETWORKED SYSTEMS
AND SERVICES

A few words about the homework

Quantum Computing and its Applications
BMEVIHIAD00, Spring 2025

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What is the purpose of homework?

- To delve into a quantum computing/communication topic of your choice

How many people can do the homework?

- The homework can be done individually or in groups (2-3-4 people).

What can be used for the homework?

- Anything can be used (including artificial intelligence). However, be careful with AI and please state exactly if you used AI (except for correcting / improving your text).

What is the deadline?

- The deadline for homework is May 4 at midnight

What is this " Submit for first round review (optional, until March)" deadline?

- The homework is in two parts. Anyone who submits the first part of the homework by midnight on March 20 will be reviewed and given feedback on how to maximize the accuracy of the first part. The corrected first part and the second part must be submitted by the final deadline, and only then will we mark the homework (both the first part and the second part).

You can choose one topic from this list

- 1, Back to the future 30
- 2, Back to the future 2100
- 3, Quantum computing basics – Bloch sphere simulator
- 4, Quantum computing and artificial intelligence
- 5, Quantum computer and supercomputer

Detailed instructions in the PDF file

Submission via the Moodle

<https://edu.vik.bme.hu/>

Direct link of the course:

<https://edu.vik.bme.hu/course/view.php?id=13765>

There will be a dedicated assignment in the Moodle (with a deadline in March). After that, there will be another dedicated assignment (with a deadline in May).

ANY QUESTIONS?