

Data Mining, Sheet 2

In this exercise sheet we will use the Google Cloud Platform. Here is the URL you will need to access in order to request a Google Cloud coupon. You will be asked to provide your university email address and name. An email will be sent to you to confirm these details before a coupon is sent to you.

<https://gcp.secure.force.com/GCPEDU?cid=ONE2n9dLRLwHTpcERNAuTOW5nkbB90gSSeQJhf5m30e8ZJxU5vyYTRsGJ4T6L8DP3/>

You will be asked for a name and email address which needs to match your university domain. A confirmation email will be sent to you with a coupon code.

You can request a coupon from the URL and redeem it until: 2/23/2024

Coupon valid through: 10/23/2024

You can only request ONE code per unique email address.

Please do not mine crypto currency with that coupon.

Exercise 1

Redeem a coupon for the Google Cloud Platform.

Exercise 2

Set up a virtual machine in GCP.

Exercise 3

Run a Jupyter notebook server on your own virtual machine. Take care to restrict the access to authorized users!

If you feel adventurous: connect Google Colab to your own virtual machine.

Exercise 4

Data Visualization aims to communicate data clearly and effectively through graphical representation. Give a concise summary of data visualization techniques and present for each technique a real-world example. You may want to read, e.g., Chapter 2.3 (pages 56 to 65) in the old (3rd) edition of our textbook.

Exercise 5

Give an overview of modern tools that can be used to visualize data. (Here you are not asked to talk about visualization techniques. Instead, the question is what kind of software products exist that support data visualization.) Which of these tools are readily available in your shiny new GCP VM?