

High Integrity Systems Project

TSA Tasks 09

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HIS Project progress:

To summarize our discussion today I would like to point out the three final goals of the project:

1. The final, joined document, written in L^AT_EX, should explain the main findings of the project, the experiences and the mathematical details of the methods used. Based on this document there will be a
2. Viva on March 1st, 2024 for each of you.
3. The best code should be consolidated and stabilized to be run on a fast GPU cluster, with a big dataset!

For the preparation we continue to work through the book:

1. Please summarize chapters 15 and 16 of the book *Modern time series forecasting with Python*!
2. Please run the corresponding code of chapters 15/16, comment the code and explain it! Please explain also errors and how you solved them!
3. Please continue to build a repository with running code examples for sharing with your colleagues!
4. Please further explore the Matlab TSA capabilities:
 - Explain the theory of *Wavelet Analysis*.
 - Look into *Wavelet Scattering*.
 - Read *Wavelet Time Scattering for ECG Signal Classification* in the Matlab documentation, and
 - run the code and explain it!
5. As discussed, the group has to provide updated versions of your HIS project document!
6. **Urgent advice: The project is an ongoing exam! All students must contribute and collect grades for the final grade!**