The CAS Project yields 4 ECTS points (~120 hours workload) and is a data science project on data of your choice. The deliverable is a report (pdf) with supporting notebooks. The project should have its github respository. You can and are encouraged to work in teams. The project report is typically between 10 and 20 pages. Your work can be a consolidation of things you have done during the CAS or a new project on a new dataset.  
 **Project Report Outline (this is a guideline, you may do it a bit differently):**(if you are writing a publication based on your project, you can of course use the publication draft as report)  
- Front page with title, author names and emails, confidential statement if needed, abstract  
- Introduction  
- Data (possibly with data flow, data quality, feature engineering, preprocessing, cleaning, ...)  
- Exploratory data analysis (with descriptive statistics and plots)  
- Machine learning and or statistical analysis  
- Results Discussion (discuss significance of and uncertainty on the results)  
- Conlcusion and Outlook  
- Acknowledgements  
- References  
  
**Formal criteria for the report:**  
- Is the report acceptable regarding grammar and syntax?  
- Is the report sufficiently organised (title, author, affiliation, contact information, references) ?  
- Are illustrations, tables and numerical presentations acceptable (visually, axis labelling, referenced in text) ?  
- Does the report reference data sources and previous works sufficiently ?  
- Does the report apply terminology, methods and best practices taught in the CAS ?  
- Is the data science task well-defined and clearly formulated ?  
- Is the data set, the metadata and the data quality sufficiently described ?  
- Are the applied methods sufficiently described ?   
- Are the analysis results critically assessed with uncertainty estimations ?