Medical Electronics - autumn 2019/20

Lecture schedule

Date	Lecturer	Topic
4.10.2019		
prof. Paweł Strumiłło	Introduction to biomedical enginering	
11.10.2019	prof Paweł Strumiłło	ECG
18.10.2019		
No lecture		
No lecture		
25.10.2019		
dr Aleksandra Królak		
Biomedical systems, transducers, amplifiers		
Artifacts and noise		
1.11.2019		
No lecture	No lecture	
8.11.2019		
start at 12:00		
dr Robert Strąkowski		
Thermovision		
15.11.2019	prof. Andrzej Materka	
Medical Imaging I		
22.11.2019	prof. Andrzej Materka	Medical Imaging II
29.11.2019	prof. Andrzej Materka	Medical Imaging III

6.12.2019	dr Aleksandra Królak

Lecture cancelled (Dean's hours)

13.12.2019	dr Aleksandra Królak	EMG, EEG, EOG, Telemedicine
20.12.2019	dr Aleksandra Królak	Test
10.01.2020	dr Aleksandra Królak	Test - resit 1
17.01.2020	dr Aleksandra Królak	Test - resit 2

Laboratory/project schedule

Date	Group 1	Group 2
4.10.2019	Laboratory 1	No classes
11.10.2019	Laboratory 2	Laboratory 1
18.10.2019	No classes	Laboratory 2
25.10.2019	Laboratory 3	Laboratory 3
8.11.2019- -end of semeter	Work on projects	Work on projects

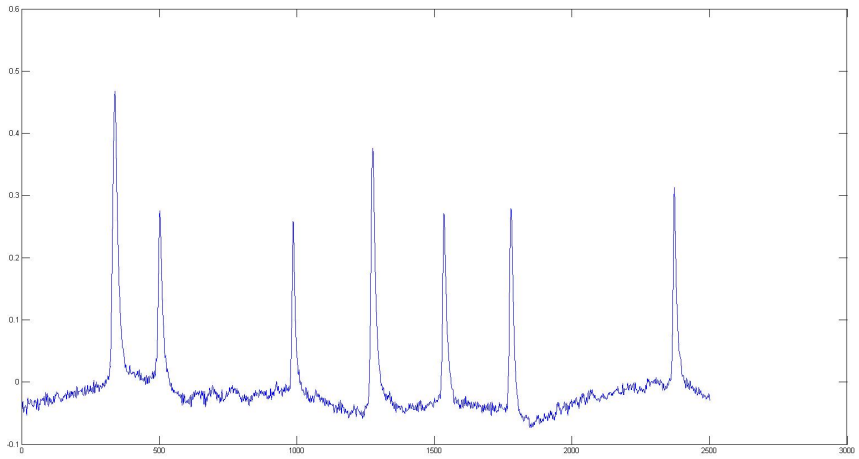
Link: Course files / Pliki dla przedmiotu

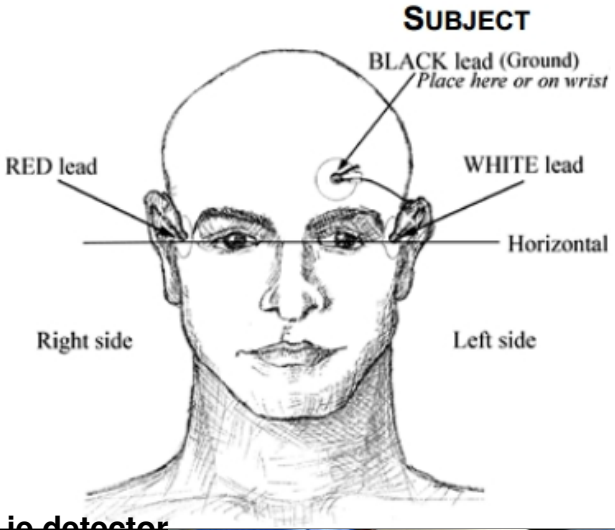
Laboratory files
Laboratory 1 - download Laboratory 2 - download Laboratory 3 - download SevSeg library - download

DHT library - download

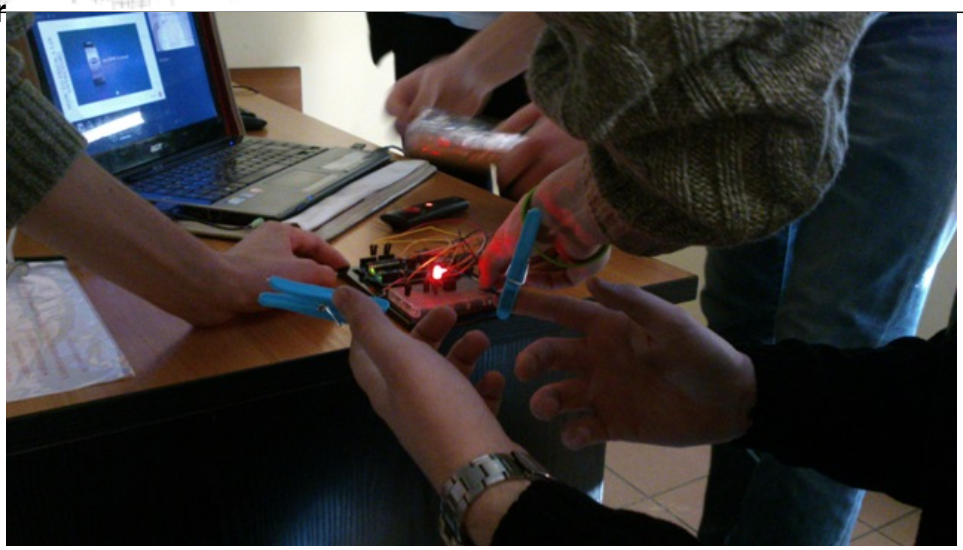
Example projects
Fatigue detection on the basis of eye blink dynamics analysis

Analysis of eye-blink dynamics from EOG measurement in different scenarios generating mental fatigue.





Lie detector

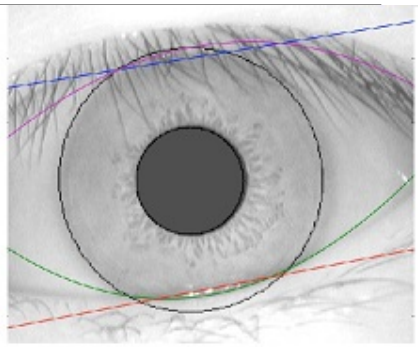


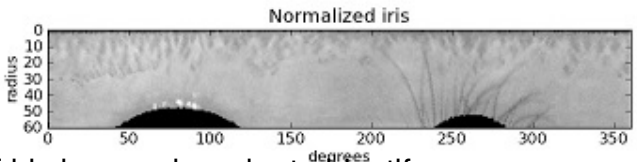


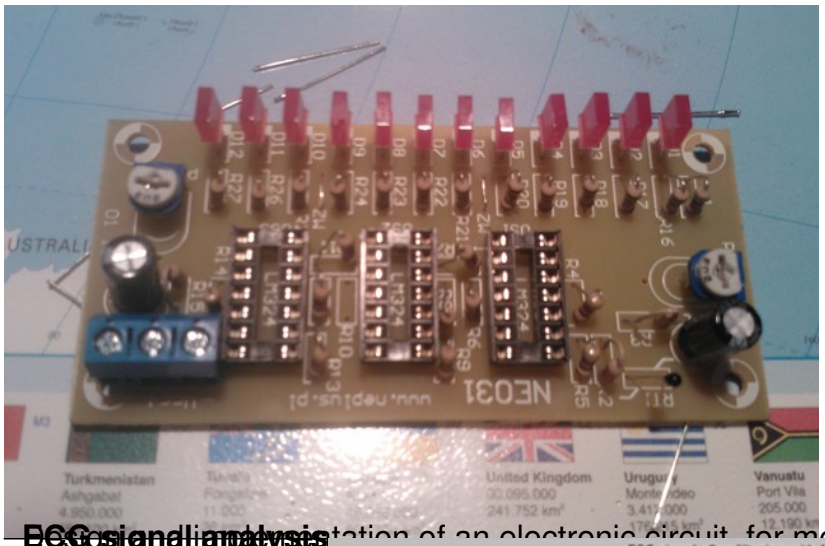


Iris-based person identification

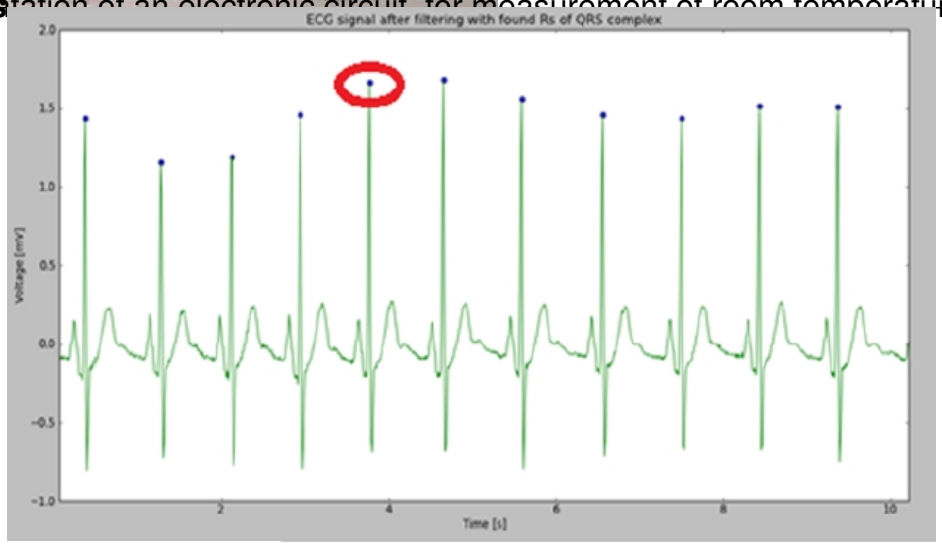


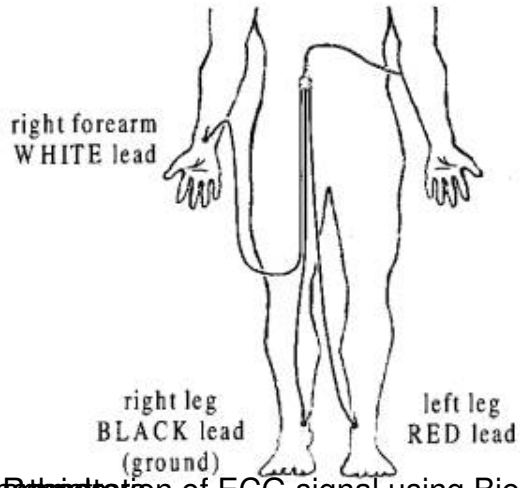






ECG signal analysis Implementation of an electronic circuit for measurement of room temperature.





Registration of ECG signal using Biopac system and implementation of signal processing for extraction of ECG signal parameters.