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EPR402 Project Progress Meeting #7
Project Lab 1

- Main outcome of meeting is that the focus of the project is real-time performance and running the system on a PC – not porting it to run inefficiently on an embedded platform, although that is necessary for Project requirements
- Network training does not have to be done from first principles – already demonstrated a first principles approach with code, can now replace with library training and discuss differences in report
- Main focus = solve the problem and not train network, that's ancillary to the project and it was a choice to use ML – not a specification
- Original performance specs could have been unrealistic – if it turns out to be so, talk about it in demo and report with evidence
- System must work first on PC before embedded platform – then transfer it or parts of it to an embedded platform
- Have own versions of all subsystems but use faster vectorized stuff (libraries) to get system working in real time and discuss performance differences in report.
- In the final report, the discussion about what it would take to get own implementation to function similarly to state of the art libraries will be important – future goals or work
- Increase speed of system by vectorizing operations wherever possible or using optimized routines
- Don't spend time optimizing linear algebra (Numpy) – not core of project and time better spent working on specifications – goal of project
- IEEE referencing and latex report templates used for ISG group
- Perform segmentation with classical approaches and establish performance then look at performing it with ML as part of neural network pipeline (SSD)
- Always try have full system working – replace working prototype with first-principles components and establish a baseline and direction of future work
- Goal for next meeting is to work on all items mentioned here and have working prototype to show