



Mobile Computing Lab

Q&A

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Where We Are?

Option 1: Activity Monitoring

■ Activity Monitoring + Transfer Learning

1. **Activity Monitoring:**
accelerometer + kNN (or other)
2. Transfer Learning (**WS4**):
domain adaptation

■ Evaluation criteria:

- Performance and creativity

Demos: 28.04.2021

Progress Review: 02.06.2021

Final demos: 23.06.2021

Option 2: Free Choice

■ Your own project (requires approval)

1. Pitch your idea
2. **Implementation**

■ Evaluation criteria:

- Technical depth and creativity

Progress Review: 05.05.2021

Progress Review: 02.06.2021

Final demos: 23.06.2021

Option 1: "Evaluation" Criteria

How do I show my demo?

- **Online**
- **"Remote" demos – not easy, especially live!**
 - Video recording
 - *Mirror your smartphone's screen to your PC*
 - *Zoom or WebEx to record screen*
 - Live presentation → mirror your smartphone's screen to your PC:
 - *WebEx on a smartphone and then share screen (?)*
 - *Screen sharing software, e.g., Vysor (free)*
- **No worries if everything fails → we will surely find a solution!**

Option 1: "Evaluation" Criteria

■ What we want to see:

1. Your app is working smoothly
 - *No crashing*
 - *Nice visualization matters*
2. App performs reasonably well
 - *Predictions make sense, mispredictions are OK*
3. Show a confusion matrix on your test set
 - *Only true / false positives AND true / false negatives for next week*
 - *You can compute advanced metrics for your final report*

Example confusion matrix:

		Predicted Class		
		Positive	Negative	
Actual Class	Positive	True Positive (TP)	False Negative (FN) Type II Error	Sensitivity $\frac{TP}{(TP + FN)}$
	Negative	False Positive (FP) Type I Error	True Negative (TN)	Specificity $\frac{TN}{(TN + FP)}$
		Precision $\frac{TP}{(TP + FP)}$	Negative Predictive Value $\frac{TN}{(TN + FN)}$	Accuracy $\frac{TP + TN}{(TP + TN + FP + FN)}$

What is a confusion matrix and advanced classification metrics?

<https://manisha-sirsat.blogspot.com/2019/04/confusion-matrix.html>

Option 2: Upcoming Progress Review

What type of questions to expect?

- Give a quick summary what your app does, no slides are required
- Be prepared to answer the following questions:
 - What is the state-of-the-art you are building upon?
 - *Survey methods that provide solutions to the same or a similar problem.*
 - What is your approach and why?
 - What are the data sets you rely on in your work? If none, how do you gather data?
 - Do you already have some first results? Gathered data / confusion matrix / etc.
 - What is the status of your app implementation?
 - If you work on your project in a team: How did you split the work?
- Hint: Start adding answers to these questions to your report

Questions?