Practical Course AI
Status Sprint 12

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Preprocessing & Baseline (AN)

- Preprocessing:
  Generated dataset (original & augmented) for remaining game

- Modeling:
  Implemented a baseline linear model

Model (TM)

- Debug with minimal Elman-RNN cell
- Issues: ReLu after LSTM, few data, early stopping
- Rework loss function (RMSE per ball)
- Training on GPU
- Preparations for Transformer

	0	1	2	3	4	5	6	7	8
0	1.02626	0.88717	1.64353	-0.03050	-0.10000	-0.10000	1.04986	0.10143	1.70158
1	0.96567	0.83253	1.62026	-0.06438	-0.10000	-0.10000	1.11183	0.03654	1.68533
2	0.90509	0.77790	1.59700	-0.09826	-0.10000	-0.10000	1.17380	-0.02835	1.66909
3	0.84450	0.72326	1.57373	-0.13214	-0.10000	-0.10000	1.23576	-0.09324	1.65284
4	0.78392	0.66863	1.55047	-0.16602	-0.10000	-0.10000	1.29773	-0.15812	1.63659
5	0.73459	0.54507	1.54875	-0.12501	-0.15067	-0.09091	1.33423	-0.21287	1.67567

Training (SB)

- Fixed some mistakes that improved convergence of normal lstm training
- Fixed mistakes in the prediction with a trained model
- Finished routines for singlestep and multistep prediction video output
- Tested different values for datasets/modelparameters

Rendering (SG)

- Currently working on a way to show real data and predicted data together

Outlook

- Overcome data bottleneck
- Train with multi-step prediction loss
- Compare model architectures
- Implement comparison view (labels/predictions)