

TABLE I: Subject 1 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.981	0.981	0.963	0.949	0.968 ± 0.016	0.691	0.764	0.947	0.922	0.831 ± 0.123
RMSE	9.43	9.52	3.73	4.09	6.69 ± 3.22	10.00	10.01	7.17	6.89	8.52 ± 1.72

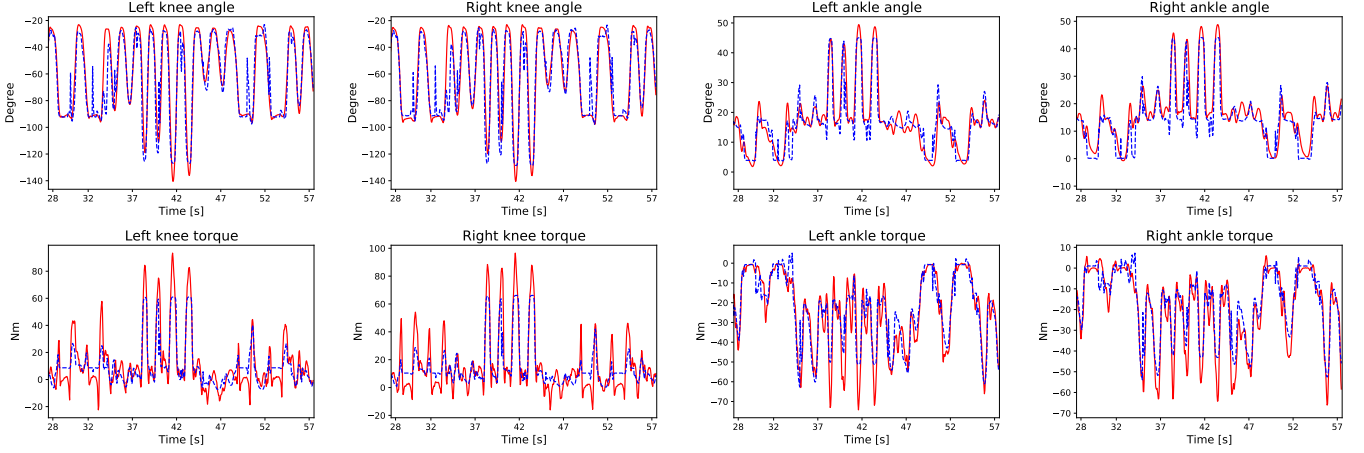


Fig. 1: Comparison of model test set estimates and measurements for subject 1 during a plotting interval of 30 s. "—" indicates measurements and "----" indicates predictions.

TABLE II: Subject 2 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.949	0.946	0.769	0.762	0.857 ± 0.105	0.746	0.766	0.727	0.592	0.708 ± 0.079
RMSE	12.95	12.98	6.14	5.67	9.44 ± 4.08	11.92	12.54	10.10	8.67	10.81 ± 1.76

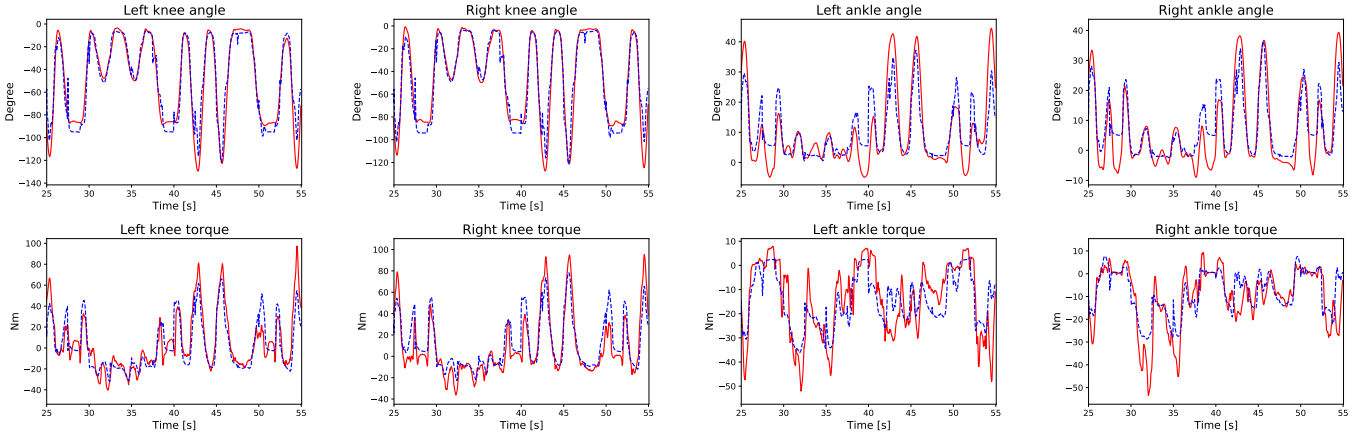


Fig. 2: Comparison of model test set estimates and measurements for subject 2 during a plotting interval of 30 s. "—" indicates measurements and "----" indicates predictions.

TABLE III: Subject 3 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.982	0.984	0.925	0.956	0.962 ± 0.028	0.969	0.951	0.950	0.957	0.957 ± 0.009
RMSE	6.33	6.30	3.06	2.95	4.66 ± 1.91	4.91	5.38	4.04	4.35	4.67 ± 0.59

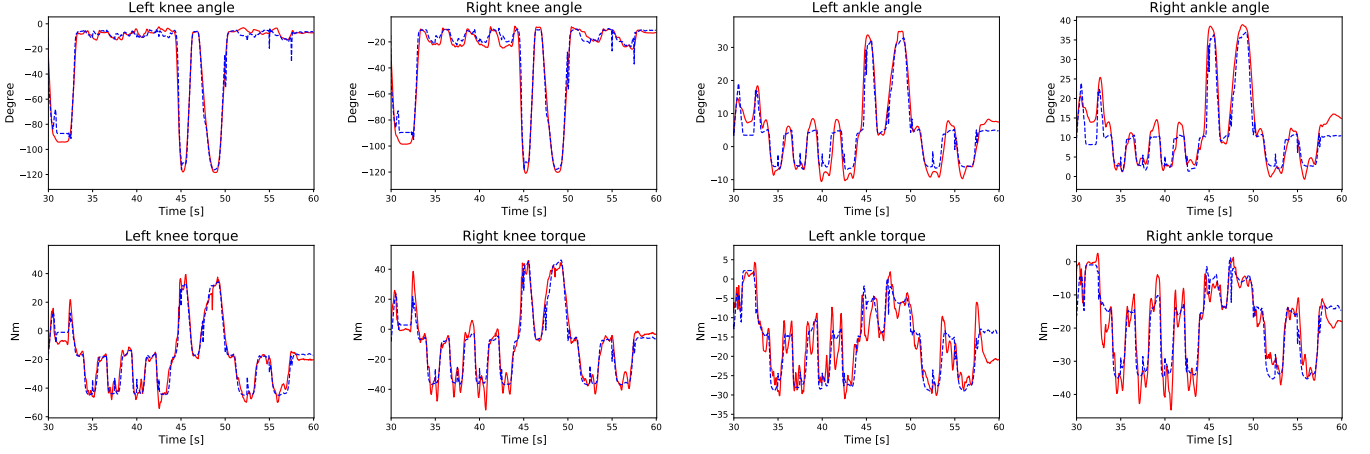


Fig. 3: Comparison of model test set estimates and measurements for subject 3 during a plotting interval of 30 s. "—" indicates measurements and "- - -" indicates predictions.

TABLE IV: Subject 4 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.982	0.986	0.931	0.967	0.966 ± 0.025	0.934	0.945	0.956	0.936	0.943 ± 0.010
RMSE	7.41	6.57	4.55	3.97	5.63 ± 1.63	5.77	6.08	4.18	6.19	5.56 ± 0.93

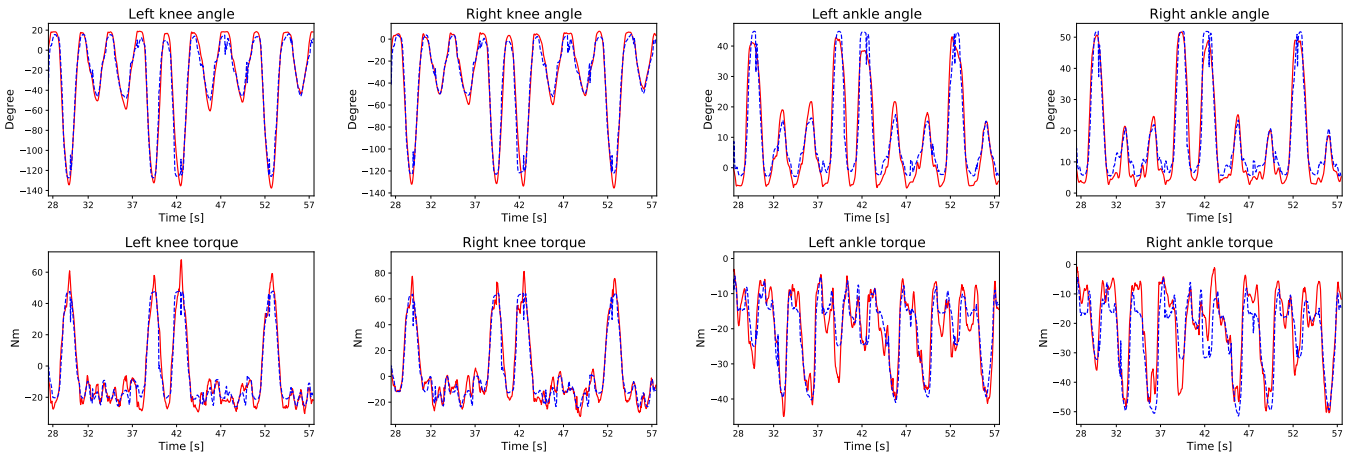


Fig. 4: Comparison of model test set estimates and measurements for subject 4 during a plotting interval of 30 s. "—" indicates measurements and "- - -" indicates predictions.

TABLE V: Subject 5 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.993	0.993	0.972	0.970	0.982 ± 0.013	0.954	0.928	0.872	0.880	0.909 ± 0.039
RMSE	5.69	5.80	2.90	2.78	4.29 ± 1.68	6.31	7.05	11.83	9.05	8.56 ± 2.47

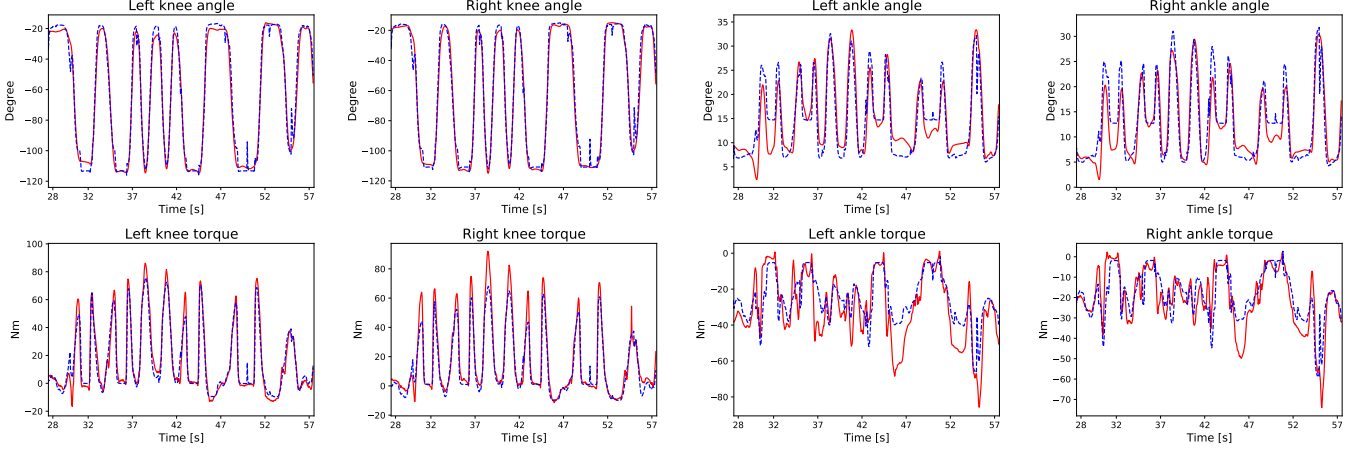


Fig. 5: Comparison of model test set estimates and measurements for subject 5 during a plotting interval of 30 s. "—" indicates measurements and "- - -" indicates predictions.

TABLE VI: Subject 6 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.981	0.983	0.958	0.963	0.971 ± 0.012	0.814	0.782	0.915	0.913	0.856 ± 0.068
RMSE	9.31	9.06	4.82	4.85	7.01 ± 2.51	9.83	11.57	7.55	7.31	9.07 ± 2.02

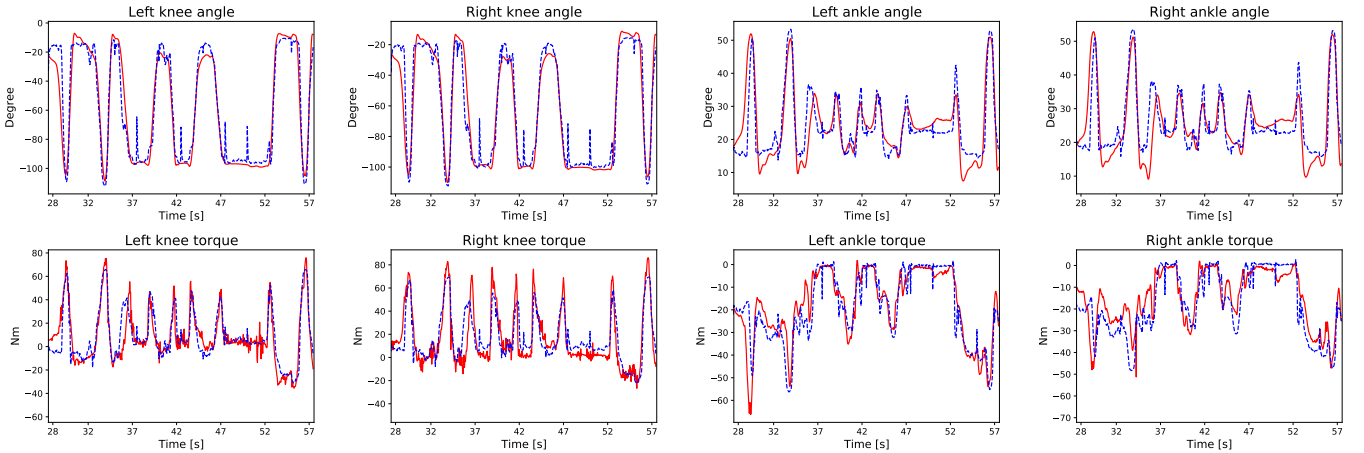


Fig. 6: Comparison of model test set estimates and measurements for subject 6 during a plotting interval of 30 s. "—" indicates measurements and "- - -" indicates predictions.

TABLE VII: Subject 7 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.960	0.965	0.911	0.912	0.937 ± 0.030	0.907	0.898	0.938	0.896	0.910 ± 0.019
RMSE	9.86	9.48	5.75	5.21	7.58 ± 2.43	11.69	11.46	9.07	9.13	10.34 ± 1.43

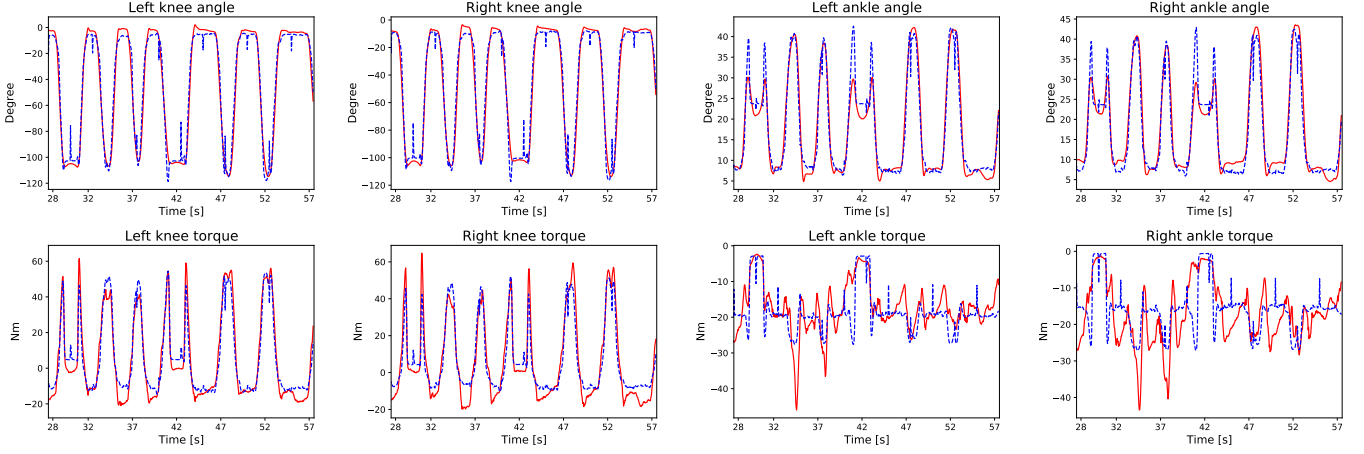


Fig. 7: Comparison of model test set estimates and measurements for subject 7 during a plotting interval of 30 s. "—" indicates measurements and "- - -" indicates predictions.

TABLE VIII: Subject 8 personalized model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.990	0.990	0.979	0.976	0.984 ± 0.007	0.909	0.871	0.920	0.788	0.872 ± 0.060
RMSE	6.41	6.13	3.04	3.19	4.69 ± 1.83	6.38	6.68	5.33	7.62	6.50 ± 0.94

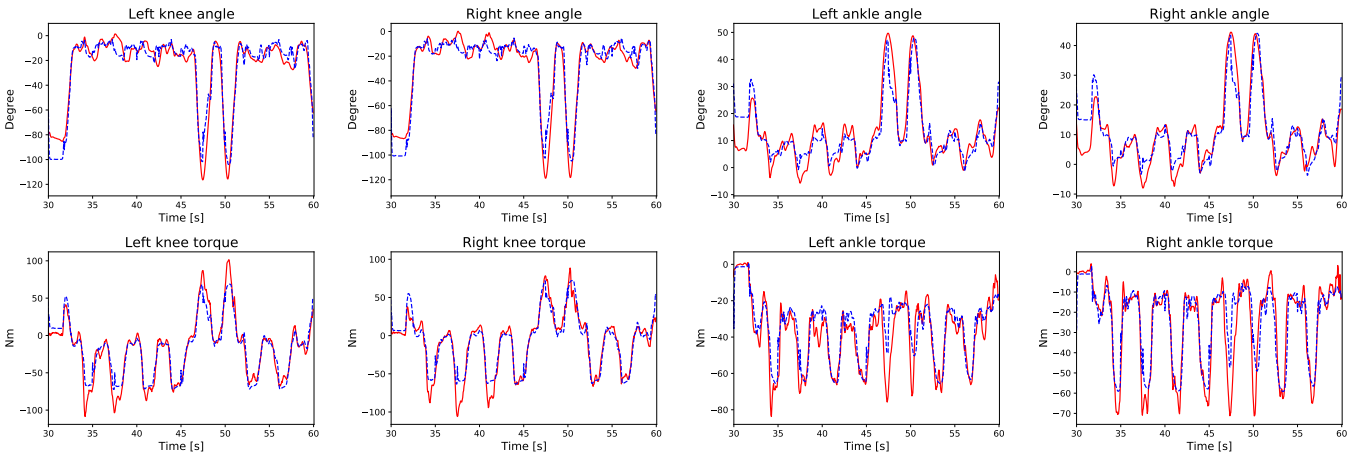


Fig. 8: Comparison of model test set estimates and measurements for subject 8 during a plotting interval of 30 s. "—" indicates measurements and "- - -" indicates predictions.

TABLE IX: Subject 1 general model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.938	0.941	0.763	0.596	0.810 ± 0.165	0.548	0.640	0.886	0.865	0.735 ± 0.167
RMSE	19.37	18.86	10.34	10.88	14.86 ± 4.92	20.29	22.08	13.13	11.46	16.74 ± 5.23

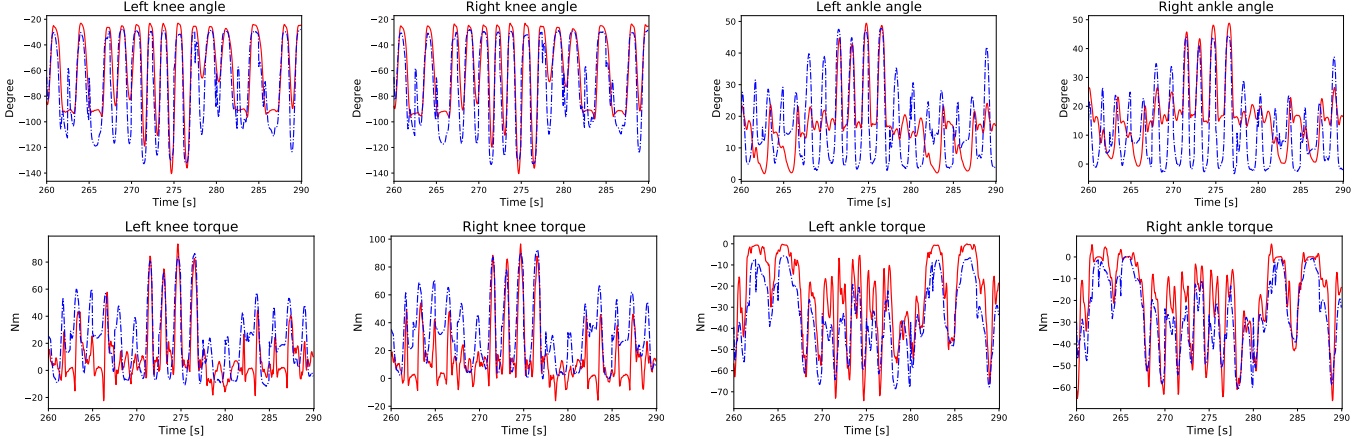


Fig. 9: Comparison of the general model estimates against measurements for subject 1 during a plotting interval of 30 s. ”—” indicates measurements and ”- - -” indicates predictions.

TABLE X: Subject 4 general model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.824	0.876	0.739	0.876	0.829 ± 0.065	0.772	0.832	0.922	0.897	0.856 ± 0.067
RMSE	22.87	19.86	7.29	7.53	14.39 ± 8.15	8.89	9.47	5.41	6.83	7.65 ± 1.87

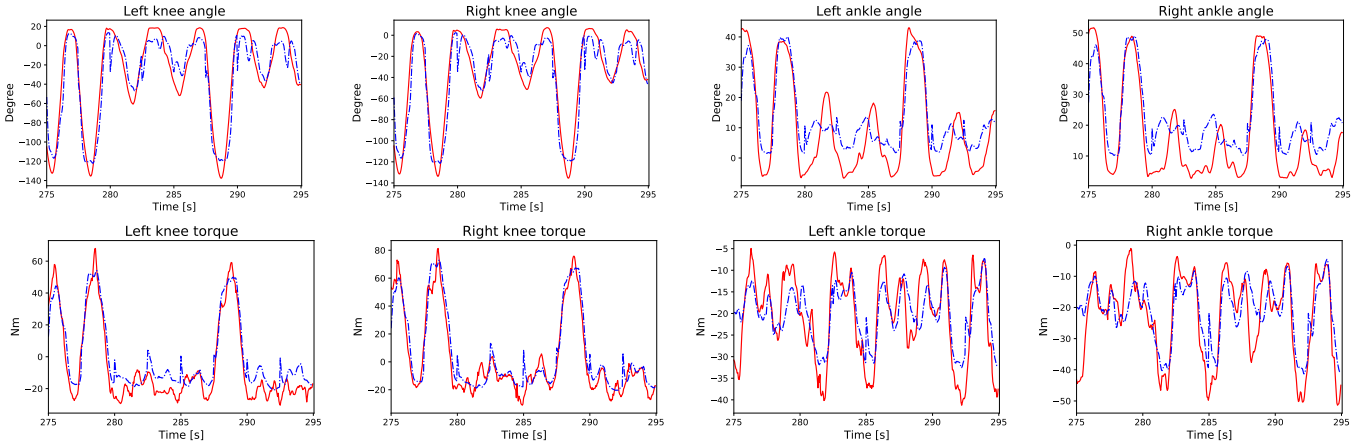


Fig. 10: Comparison of the general model estimates against measurements for subject 4 during a plotting interval of 30 s. ”—” indicates measurements and ”- - -” indicates predictions.

TABLE XI: Subject 5 general model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.9396	0.9328	0.9402	0.9098	0.931\pm0.014	0.8276	0.8129	0.8967	0.8345	0.843\pm0.037
RMSE	15.83	16.37	4.74	5.7	10.66\pm6.3	15.23	15.44	13.21	14.49	14.59\pm1.01

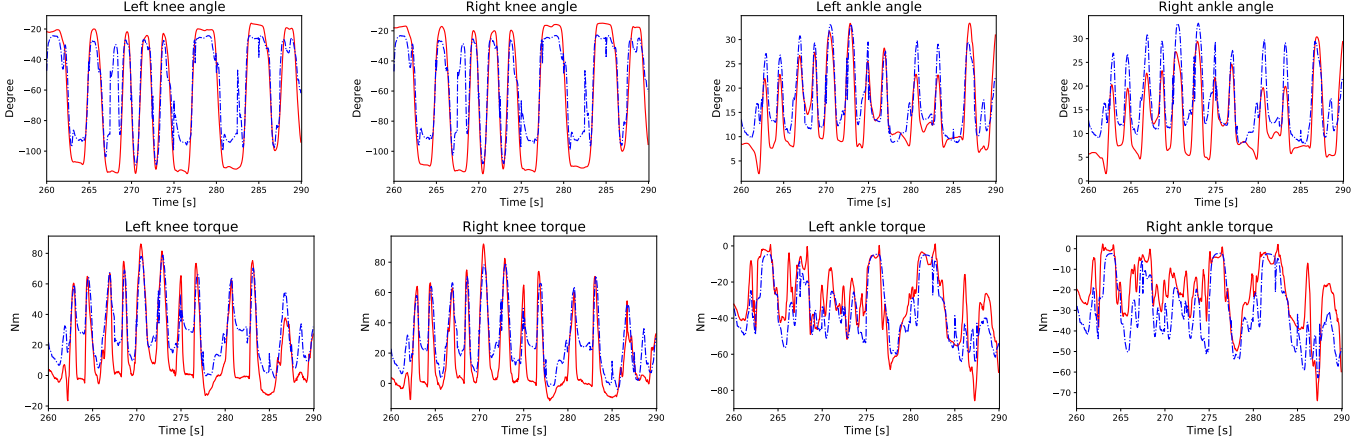


Fig. 11: Comparison of the general model estimates against measurements for subject 5 during a plotting interval of 30 s. ”—” indicates measurements and ”- - -” indicates predictions.

TABLE XII: Subject 8 general model results

Evaluation metrics	Angle					Torque				
	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.	Left knee	Right knee	Left ankle	Right ankle	mean \pm Std.
R^2	0.9097	0.9263	0.9213	0.9073	0.916\pm0.009	0.7882	0.7984	0.7916	0.9375	0.829\pm0.073
RMSE	16.79	15.58	5.77	6.17	11.08\pm5.92	10.55	9.03	7.22	5.81	8.15\pm2.07

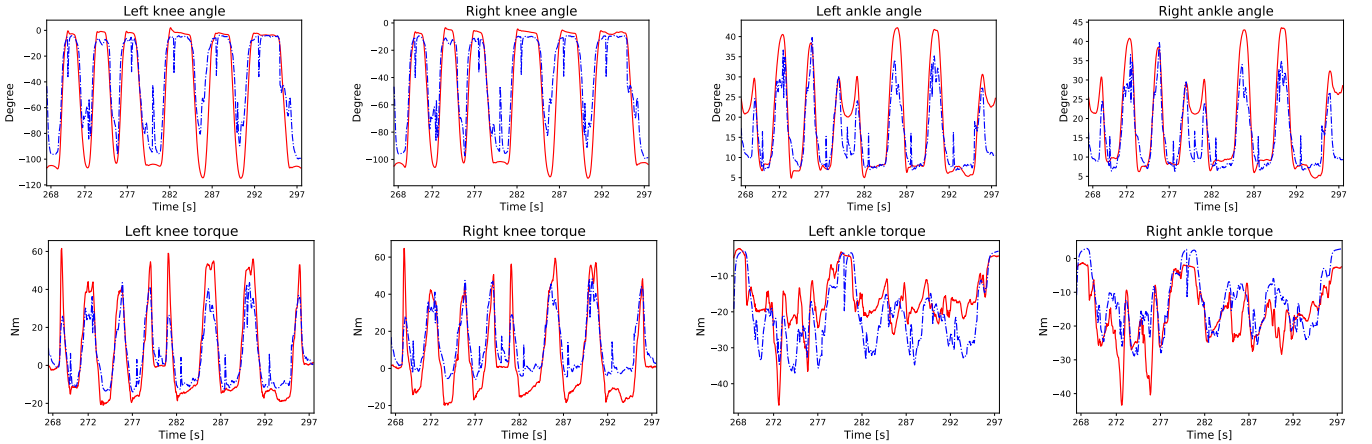


Fig. 12: Comparison of the general model estimates against measurements for subject 8 during a plotting interval of 30 s. ”—” indicates measurements and ”- - -” indicates predictions.