











SwiLTra-Bench: The Swiss Legal Translation Benchmark

Joel Niklaus¹, Jakob Merane², Luka Nenadic², Sina Ahmadi³, Yingqiang Gao³, Cyrill A. H. Chevalley⁴, Claude Humbel³, Christophe Gösken², Lorenzo Tanzi⁵, Thomas Lüthi⁶, Stefan Palombo¹, Spencer Poff¹, Boling Yang¹, Nan Wu¹, Matthew Guillod¹, Robin Mamié⁷, Daniel Brunner⁷, Julio Pereyra¹, Niko Grupen¹ ¹Harvey; ²ETH Zurich; ³University of Zurich; ⁴University of Basel; ⁵University of Geneva; ⁶Canton of Solothurn; ⁷Swiss Federal Supreme Court

1 Introduction

- Four official languages in Switzerland
- Legal translation is a complex task
- (Partially) automating legal translations improves efficiency and access to justice

2 Research Questions

- 1. What models are best at translating Swiss laws, case summaries, and press releases?
- 2. Can frontier model performance be reached by fine-tuning smaller models?

3 Dataset

Over 180K aligned Swiss legal translation pairs (laws, case summaries, and press releases)

(a) CH-Law-Trans dataset.							
Source	Split	#file	#de	#fr	#it	#rm	#en
Law	Train	5,206	5,206	5,206	5,206	51	219
	Valid	10	10	10	10	10	10
	Test	20	20	20	20	20	20
Article	Train	129,070	126,308	127,049	126,223	8,680	16,347
	Valid	789	785	785	784	785	785
	Test	740	738	738	738	738	738
Paragraph	Train	153,970	145,106	146,953	145,267	19,556	32,499
	Valid	1,490	1,441	1,438	1,437	1,441	1,439
	Test	1,214	1,176	1,178	1,178	1,177	1,176

Table 1: Overall corpus statistics for laws

4 SwiLTra-Judge

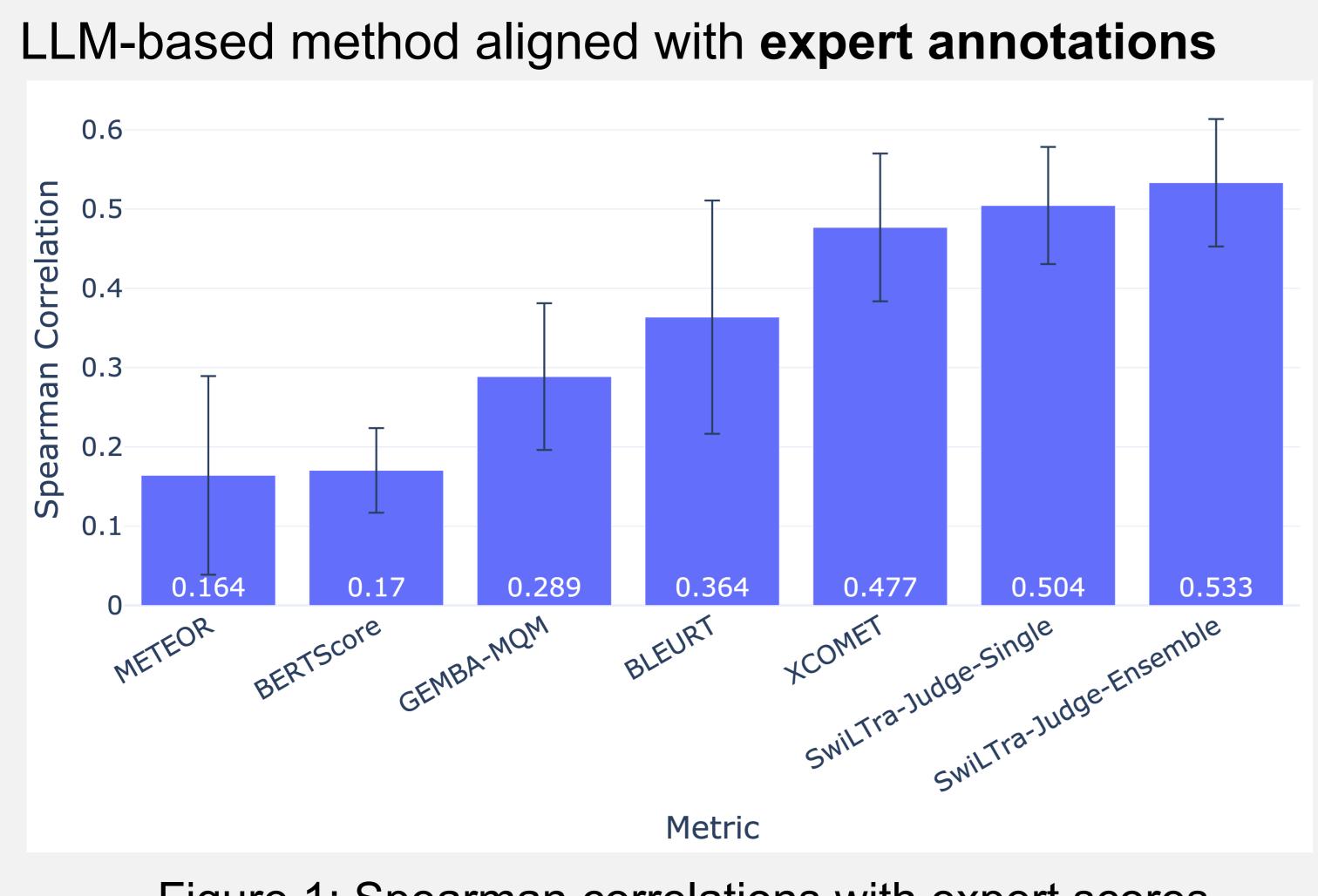


Figure 1: Spearman correlations with expert scores

5 Fine-Tuned Smaller Models

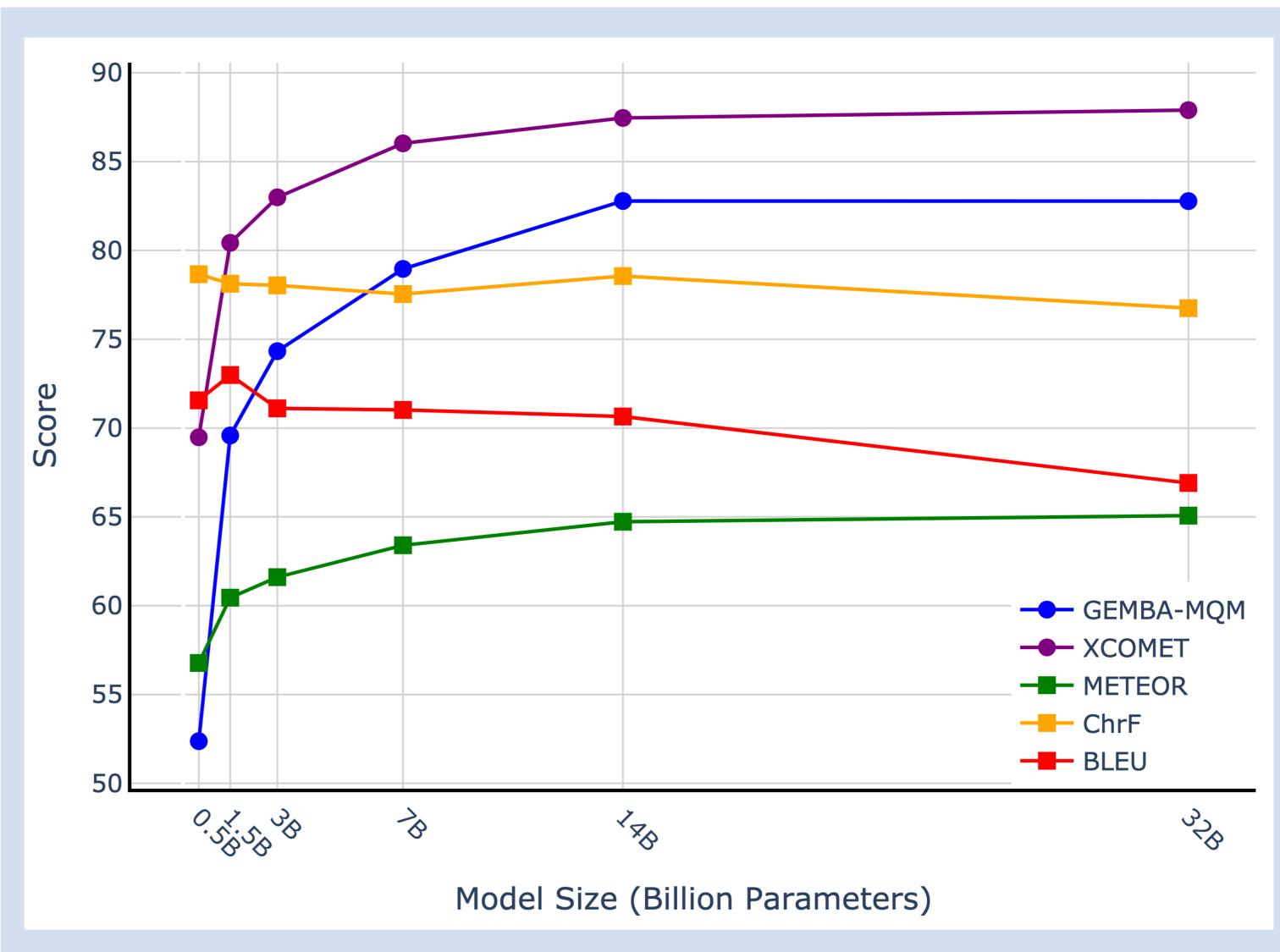


Figure 2: Metrics vs. model size for fine-tuned Qwen models

6 Main Results

- No single model wins in all tasks
- However, frontier models achieve superior translation performance across the board
- Specialized translation models excel specifically at translating laws (but less so at the other tasks)

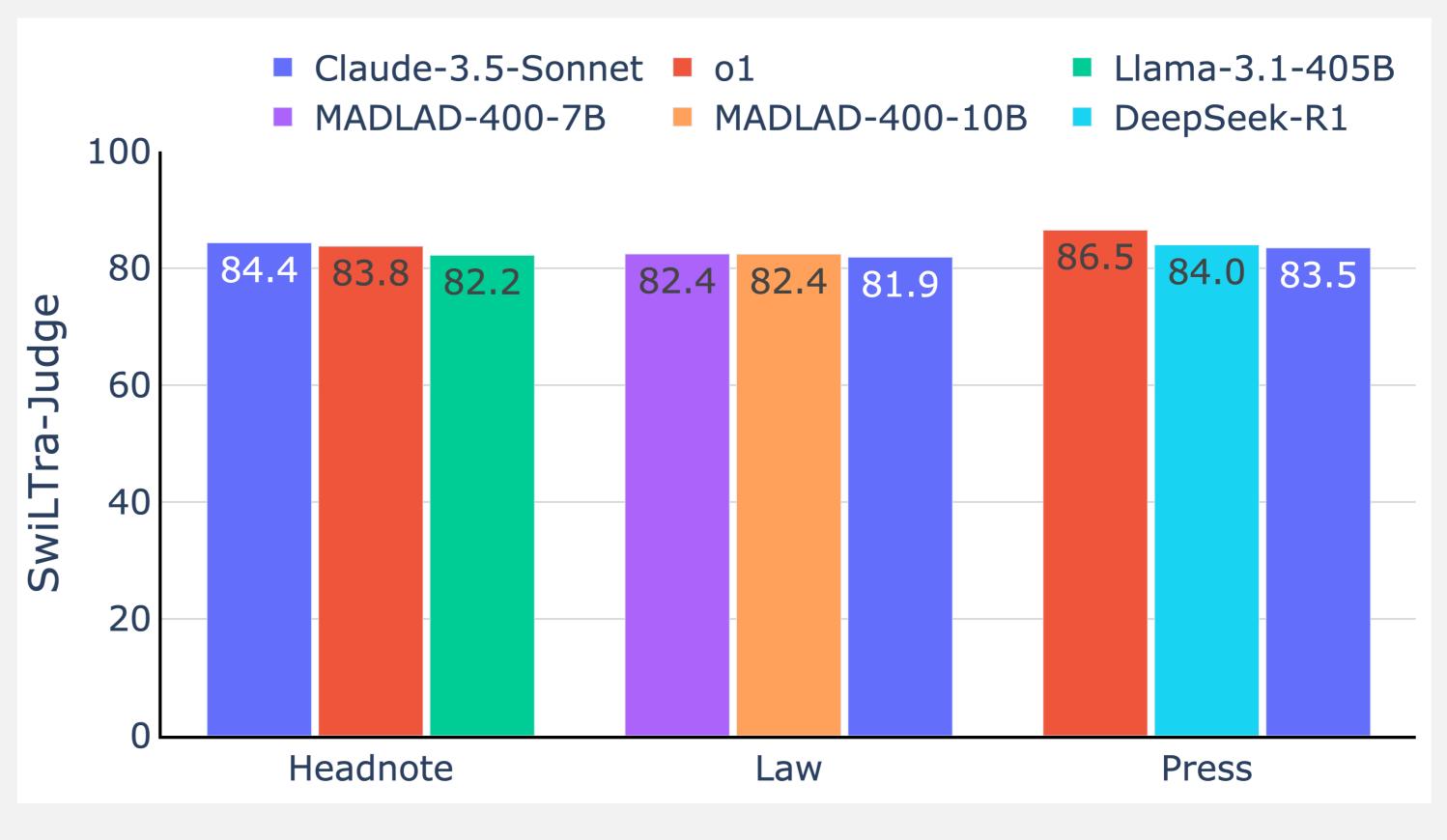


Figure 3: Best models per task

7 Summary

- Complexity of legal translations
- SwiLTra-Bench: Large-scale benchmark of over 180K aligned Swiss legal translation pairs
- Comprehensive model comparisons
- SwiLTra-Judge: LLM-based method based on expert annotations to automate evaluations