

From Bigger Models to Better Systems: Accelerating Open Intelligence

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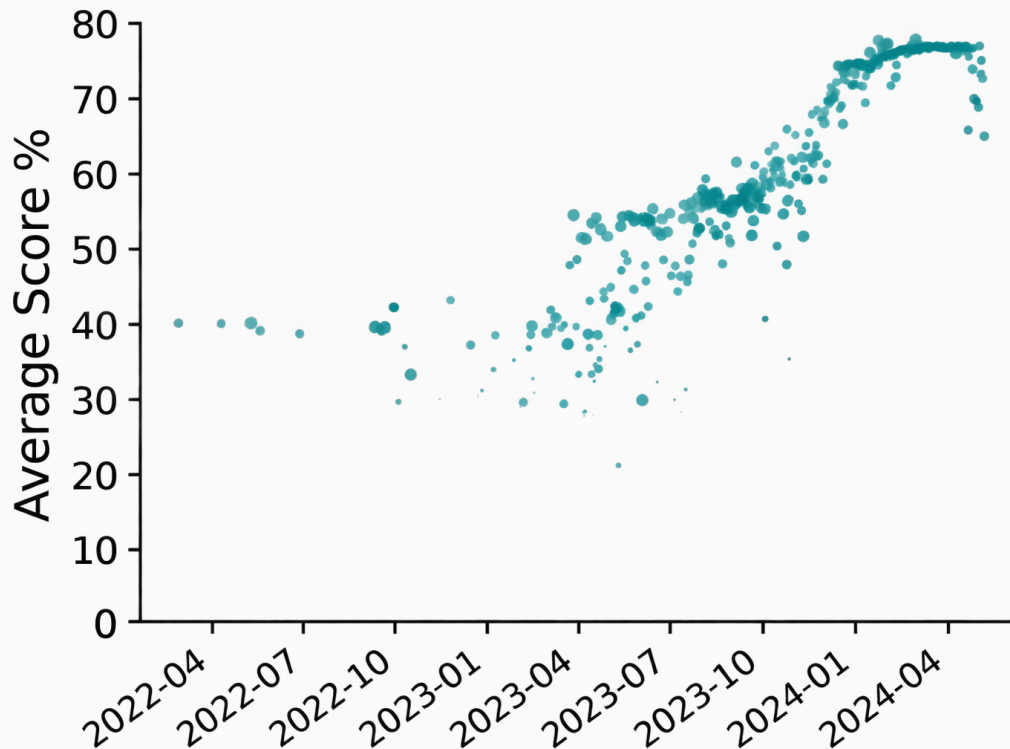
The AI Model Landscape is Changing



Sara Hooker, CEO & Co-Founder, Adaption

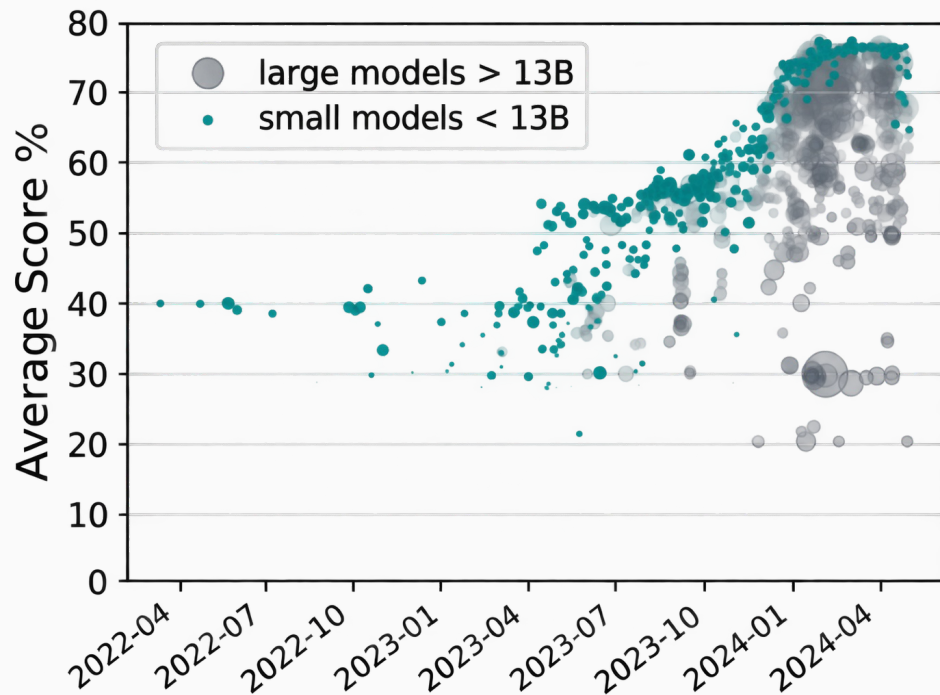
Same size, far more capable

Models under 13B on the LLM open leaderboard over time.



Small Models Frequently Outperform Larger Ones

All models over 13B (grey) that underperform the best daily model under 13B submitted to the LLM open leaderboard (green).





Pre Training



~~Pre Training~~



Post Training



~~Pre Training~~



~~Post Training~~



On The Job Training

Shopify at PyTorch Conference This Week



Cody Mazza Anthony, Shopify

Continual learning allows us to outperform frontier models on a task at a fraction of the cost, while reducing latency.



A small specialist model can outperform a frontier model

Detect

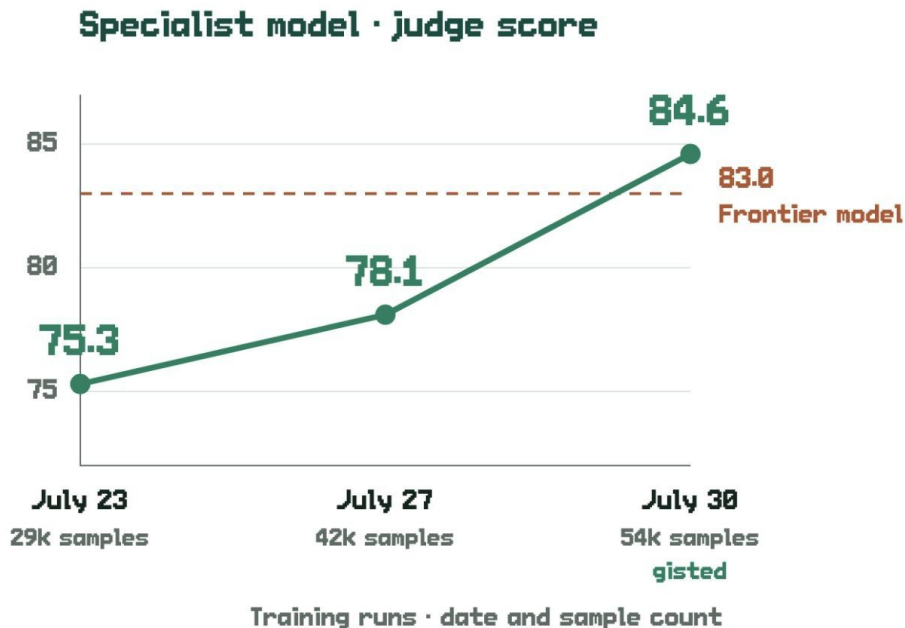
The calibrated judge flags low-scoring Buyer Profile outputs in production.

Repair

Critics diagnose each failure, we replay with the critic hint, and the judge re-scores it.

Retrain

Accepted repairs grow the sizing and quality of the training data leading to higher scores.



THE PYTORCH FOUNDATION IS THE HOME OF

THE SIX OPEN SOURCE TOOLS ACCELERATING OPEN INTELLIGENCE TODAY

Since we met last year, the PyTorch Foundation has grown to **six** projects spanning how models are built, optimized, and served.



The core open source framework for building and training deep learning models.



High-throughput, memory-efficient engine for fast LLM inference and serving.



Distributed training and optimization library for scaling very large models.



Distributed computing framework for scaling AI and Python workloads across clusters.



Python-embedded language for authoring portable, high-performance ML kernels.



Secure, fast file format for storing and sharing model weights (tensors).

Open Source Software to Train and Serve Models



Any Chip

Emerging silicon and AI accelerators.



Any Cloud

Multi-cloud ecosystem resilience.



Any Agent

Model + Harness +
Protocols + Tools



Join the community

<https://pytorch.org/community-hub/>