

商汤科技 SenseTime Group (20 HK)

日日新 5.5 对标 GPT-40, 中美 SOTA 模型发布时间差距缩至 2 个月

SenseNova 5.5 comparable to GPT-4o, difference between China and U.S. SOTA LLM launch shortened to 2 months

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热点速评 Flash Analysis

(Please see APPENDIX 1 for English summary)

事件

7月4-6日2024 WAIC 世界人工智能大会期间,我们参加了商汤科技举办的"大爱无疆·向新力"人工智能论坛。7月5日,商汤在论坛上发布了国内首个流式多模态 AI 交互大模型"日日新 SenseNova 5.5",并推出了升级版端侧模型"日日新 5.5 Lite",同时分享了大模型、算力基础设施、智能驾驶等领域的技术经验与进展,展示了赋能多个行业的实践成果。"日日新 5.5"的综合性能相比"日日新 5.0"提升了 30%,其交互效果、多项核心指标可与 GPT-40 对标。"日日新 5.5 Lite"的精度比 5.0 版提升了 10%,推理速度加快 15%,首包延迟降低了 40%。

点评

兼具多项创新点,"日日新 5.5"性能可对标 GPT-40: 1)整合跨模态信息,为用户提供实时的流式多模态交互,革新了 AI 交互模式,实现"所见即所得",也更适应场景理解、概述等多任务同时处理; 2)商汤首创构造了思维链并以先进技术验证思维链每一步的正确性,从而实现了规模化生产高质量思维链,有力增强了大模型的推理思维能力,在数理逻辑、英文、指令跟随等方面改进明显。

厚积薄发,低成本+大规模能力支撑技术高效迭代,中美 SOTA 模型差距时间缩短: OpenAI 于今年 5 月 13 日发布了 GPT-40, 距此前 2023 年 11 月 6 日推出 GPT-4 Turbo 已经过了半年多;而高汤继今年 4 月 23 日公布"日日新 5.0"后,仅 50 余天便成功迭代出"日日新 5.5",补齐了上一代存在的能力短板,且多模态能力显著提升,在大部分核心测试集指标上的表现可对标 GPT-40,大幅缩短了追赶所对标大模型的周期,凸显了其行业领先的研发能力。该模型助力拓展了在互联网、金融、医疗等垂直行业中的应用,现已有超过 3000 家政企客户在使用。

目前,"日日新 6.0" 的技术验证也已完成,并在 HuggingFace 全球榜上位居所有 12B 以下模型之首。下半年,公司计划不再区分语言模型与多模态模型,而是将 6.0 版的最终形态定位为一体化模型,继续优化流式交互,并通过端边云协同的分布式计算,拓展能力边界、覆盖更广泛的应用场景,实现推理成本的数量级下降,以支撑可持续的用户放量。未来,商汤也会依托深厚技术底蕴和经验,将三维空间信息等更多模态融入多模态能力建设。

持续深耕端侧,推进部署渗透: 升级后的端侧模型"日日新 5.5 Lite"在端侧应用所有领域都处于业内领先水平,提供高速推理,且首次延迟很低,进一步优化了用户体验。目前,"日日新"端侧模型已深入各行业,与 150 多家客户商业对接,覆盖了智能手机、平板电脑、VR 一体机、车载电脑、智能台灯等 IoT 设备部署应用;接入"日日新●商量"端侧大模型的单台设备成本已低至每年仅 9.9 元。

商汤绝影在业内率先实现了车端部署原生多模态大模型,可通过云侧、端云结合、端侧等全栈方式部署,车载的端侧 8B 多模态模型将首包延迟降低至 300 毫秒内,推理速度达每秒 40 tokens。商汤绝影此次发布了业内首个生成式交互界面产品"随心界面"、"随意操控"等车载 AI Agent,丰富车载智能化产品供应,推动多模态大模型与智能汽车深度融合。

生成式 AI 业务高增长,集团层面盈利可期: 技术进展成果不断涌现带动公司的生成式 AI 业务强劲增长,在集团中的收入占比显著提升,预计今年占比将超过 50%。商汤拥有国内领先的算力基础,服务于大量算力需求强劲的客户。近期,商汤大装置算力服务通过了国家级的算力服务能力成熟度增强级评估,成为首个通过该评估的企业。公司现阶段将算力领域创造的利润用于补贴大模型研发,大力投入生成式 AI 业务,同时积极为一些非核心业务板块对接融资,引进增量资金,以解决其短中期内的较高资金需求,目标在未来 1-2 年实现集团层面盈利。

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行业竞争加剧

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日日新 5.5 多模态核心指标 vs. GPT-4o										
	Avg. Score	MMB v1.1	MMStar	MMMU	MathVista	HallusionBench Avg.	Al2D	OCRBench	MMVet	
日日新 5.5	69.9	83.0	65.4	54.6	67.2	51.9	86.9	83.8	66.2	
GPT4o-0513	69.9	82.2	63.9	69.2	61.3	55.0	84.6	73.6	69.1	
Claude 3.5- Sonnet	67.9	78.5	62.2	65.9	61.6	49.9	80.2	78.8	66.0	
Gemini 1.5 Pro	64.4	73.9	59.1	60.6	57.7	45.6	79.1	75.4	64.0	
GPT4v-0409	63.5	79.8	56.0	61.7	54.7	43.9	78.6	65.6	67.5	
GLM-4v	60.8	78.6	53.2	45.6	45.6	44.9	76.1	81.4	60.7	
Step-1V	59.5	78.0	50.0	49.9	44.8	48.4	79.2	62.5	63.3	
Qwen-VL-Max	58.3	74.6	49.5	52.0	43.4	41.2	75.7	68.4	61.8	
GPT4v-1106	57.1	73.8	49.7	53.8	48.7	46.5	75.9	51.6	56.8	



APPENDIX 1

Summary

During the 2024 WAIC (July 4-6), we participated in the AI Forum held by SenseTime. On July 5, SenseTime launched the first streaming multi-modal AI interaction LLM "SenseNova 5.5" in China and an upgraded version of the end-side LLM "SenseChat 5.5 Lite" at the forum, shared technical experience and progress in LLM, computing power infrastructure, intelligent driving and other fields, and showcased practice achievements in empowering multiple industries. The comprehensive performance of "SenseNova 5.5" has been improved to 30% higher than that of "SenseNova 5.0", and its interaction results and numeral core indicators are comparable to GPT-40.

Comments

Leveraging efficiently enhanced technologies supported by low costs and scalability, shortening the difference between China and U.S. SOTA LLM launch to 2 months. OpenAI released GPT-40 on May 13 this year, more than half a year after the launch of GPT-4 Turbo on Nov 6, 2023; whereas SenseTime successfully upgraded to "SenseNova 5.5" in just over 50 days following the debut of "SenseNova 5.0" on Apr 23 this year, significantly improved the multi-modal capabilities, with its performance on most core test set indicators comparable to GPT-40, thus greatly shortening the period required to catch up with benchmark LLMs.

At present, the technical validation of "SenseNova 6.0" has also been completed, and it ranks No.1 on HuggingFace's global list of LLMs below 12B.

Expected to achieve profitability at the group level, with high growth of generative AI business. Continuous technical progress has driven robust growth of the company's generative AI business, and its proportion in group revenue has significantly increased and is expected to exceed 50% this year. SenseTime possesses leading computing power in China and serves a large number of customers with strong demand for computing power. At this stage, the company is using the profits from computing power segment to subsidize R&D of LLMs and vigorously investing in generative AI business, aiming to achieve profitability at the group level in the next 1-2 years.

Investment recommendation: We maintain the previous TP of HK\$1.5 and OUTPERFORM rating.

Risks:

Intensifying competition



APPENDIX 2

ESG Comments

Environmental:

environmental friendly

Social:

socially responsible

Governance:

a decent company



附录 APPENDIX

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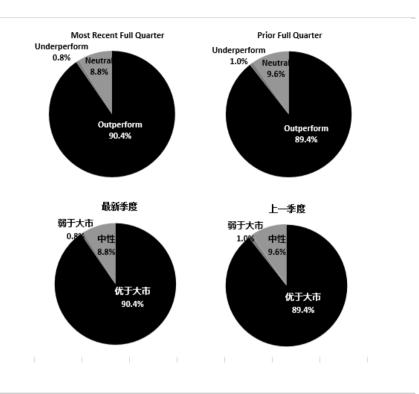
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		(hold)		
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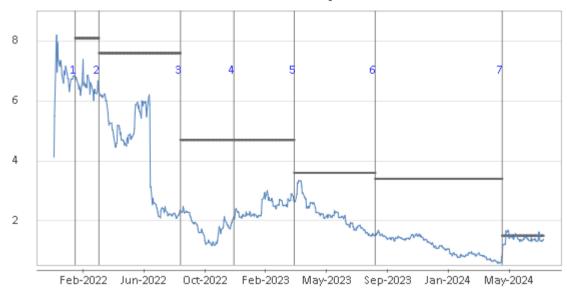
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Recommendation Chart

SenseTime Group - 20 HK



- 1. 8 Feb 2022 OUTPERFORM at 6.72 target 8.1.
- 2. 27 Mar 2022 OUTPERFORM at 6.3 target 7.6.
- 3. 26 Aug 2022 OUTPERFORM at 2.35 target 4.7.
- 4. 5 Dec 2022 OUTPERFORM at 2.01 target 4.7.
- 5. 29 Mar 2023 OUTPERFORM at 2.68 target 3.6.
- 6. 29 Aug 2023 OUTPERFORM at 1.5 target 3.4.
- 7. 25 Apr 2024 OUTPERFORM at 0.8 target 1.5.

Source: Company data Bloomberg, HTI estimates