Co-build an open source ecosystem in the era of artificial intelligence

Co-build artificial intelligence based on open source

(open source innovation, digital transformation and intelligent reconstruction)

(Report by COPU Honorary Chairman Lu Shouqun at the 20th Open Source China Open Source World Conference)

1. Huawei has achieved comprehensive and significant results in the R&D of 5G communications, smartphone operating systems (using self-made and domestically collaborated high-performance chips: 7nm/5nm), computing power (single-chip and integrated computing power), and generative large language models. Huawei's Ascend 910B chip has a performance of 376 TFLOPS, close to NVIDIA's A100 level, while the 910C offers 60% of the H100's computing power, but with 40% higher power consumption than the H100. Huawei's executive director Zhang Pingan stated: 'Huawei's innovation direction does not focus on the manufacturing process of a single chip but on innovative system architecture for chips, fully utilizing the advantages of bandwidth and energy.' NVIDIA CEO Jensen Huang said that Huawei is NVIDIA's strongest challenger. Huawei's Cloud Matrix 384 computing cluster solution (using 384 910C chips) improves cluster efficiency by 67% through high-speed bus interconnection and memory pooling, delivering a computing power of 300 PFLOPS, which is twice that of NVIDIA's GB200NVL72 system. Recently, during a conversation with reporters from the People's Daily, Huawei founder Ren Zhengfei mentioned that the U.S. has exaggerated Huawei's achievements, and Huawei is not that powerful yet, asserting that they must strive to reach that level. Our single chip still lags behind the U.S. by one generation; we use mathematics to supplement physics, non-Moore to supplement Moore, and collective computing to complement single chips, achieving practical results.

2. A batch of high-quality generative autoregressive language models has emerged. ① The Tongyi Qianwen Qwen3 mixed reasoning open-source large model developed by Alibaba's MoDa community features its flagship model Qwen3-235B-A22B along with 8 other large models, whose performance has temporarily surpassed DeepSeekR1 and OpenAIo1, officially reaching the top of the global open-source large model throne! ② The Xiaomi MiMo reasoning open-source large model, in the realm of lower parameters, MiMo-7B has surpassed OpenAIo1-mini and Alibaba's Qwen reasoning model QwQ-32B-Preview, showcasing its potential as a leading starting model in the industry for reinforcement learning.

3. The Super Agent CO-Sight developed by ZTE Corporation has topped the international authority Agent GAIA benchmark test, outperforming the four international giants: Google's DeepMind Langfun Agent, Microsoft (+OpenAI) Aworld, MIT's Infant Agent, and Meta's OWL-Workforce, ranking first! It has sparked the next wave of AI (the 'World Model').

4. The sixth generation semiconductor display's ultra-high pixel frontier technology and production line was developed by BOE, featuring ultra-high pixel density (2.24 inches with 1700 pixels), breaking existing strongholds, and establishing the world's most advanced sixth generation new semiconductor display device production line with mass production capabilities.

5. COPU organized a dozen companies to develop AIOS. AIOS comes in two types: ① one that starts with applications to integrate intelligent modules into the OS, and ② one that starts with architecture or kernel to develop fully intelligent AIOS.

共建人工智能时代的开源生态

共建基于开源的人工智能

（开源创新，数字化转型与智能化重构）

（COPU名誉主席陆首群在第二十届开源中国开源世界大会上报告）

一、华为，在5G通信，智能手机操作系统（采用自制及国内协作的高性能芯片：7nm/5nm），算力（单芯片和算力集成），生成式语言大模型等的研发方面，均取得了全面、重大的成果华为昇腾芯片910B=376TFLOPS接近英伟达A100水平，910C为H100算力的60%，但功耗高出H100的40%。华为常务董事张平安说：“华为的创新方向，不放在单颗芯片制造工艺上，而放在芯片的系统架构创新上，充分发挥带宽和能源的优势”。英伟达CEO黄仁勋说，华为是英伟达最强的挑战者，华为开发的Cloud Matrix 384算力集群解决方案（采用384颗910C芯片），依靠高速总线互联和通过内存池化，提升了集群效率67%，输出算力300PFLOPS，达英伟达GB200NVL72系统算力的2倍。近日，华为创始人任正非在与人民日报记者对话时，在谈到昇腾芯片时说，美国是夸大了华为的成绩，华为还没有这么厉害，要努力做才能达到他们的评价。我们的单芯片还是落后美国一代，我们用数学补物理，用非摩尔补摩尔，用群计算补单芯片，在结果上也能达到实用状况。

二、涌现出一批生成式自回归语言大模型精品①阿里魔搭社区开发的通义千问Qwen3混合推理开源大模型其旗舰模型为Qwen3-235B-A22B及8款大模型，其性能一度全面超越DeepSeekR1和OpenAIo1，正式登顶全球开源大模型王座！②小米Xiaomi MiMo推理开源大模型在较低参数领域，MiMo-7B超越了OpenAIo1-mini和阿里Qwen推理模型QwQ-32B-Preview，作为行业内强化学习的起步模型潜力领先。三、超级智能体(Super Agent)中兴通讯（ZTE）研发的超级智能体CO-Sight，在通过国际权威的Agent GAIA基准测试中，力压国际四强：谷歌DeepMind的Langfun Agent、微软（+OpenAI）的Aworld、麻省理工学院（MlT）的lnfant Agent、Meta的/OWL-Workforce，排名榜首！掀起了AI的下一个浪潮（“世界模型”）。

四、第六代半导体显示器超高像素前沿技术和生产线京东方研制第六代半导体显示器超高像素前沿技术（超高像素密度：2.24英寸，1700个像素），打破了现有的王牌地位，并建成全球最先进的第六代新型半导体显示器件生产线，并可量产。五、COPU组织十几家公司研发AIOS。AIOS有两种类型，①是以应用入手，在OS中加入智能模块，②是以架构或内核入手，研发全智能化的AIOS