CartoAgent: a multimodal large language model-powered multi-agent cartographic framework for map style transfer and evaluation

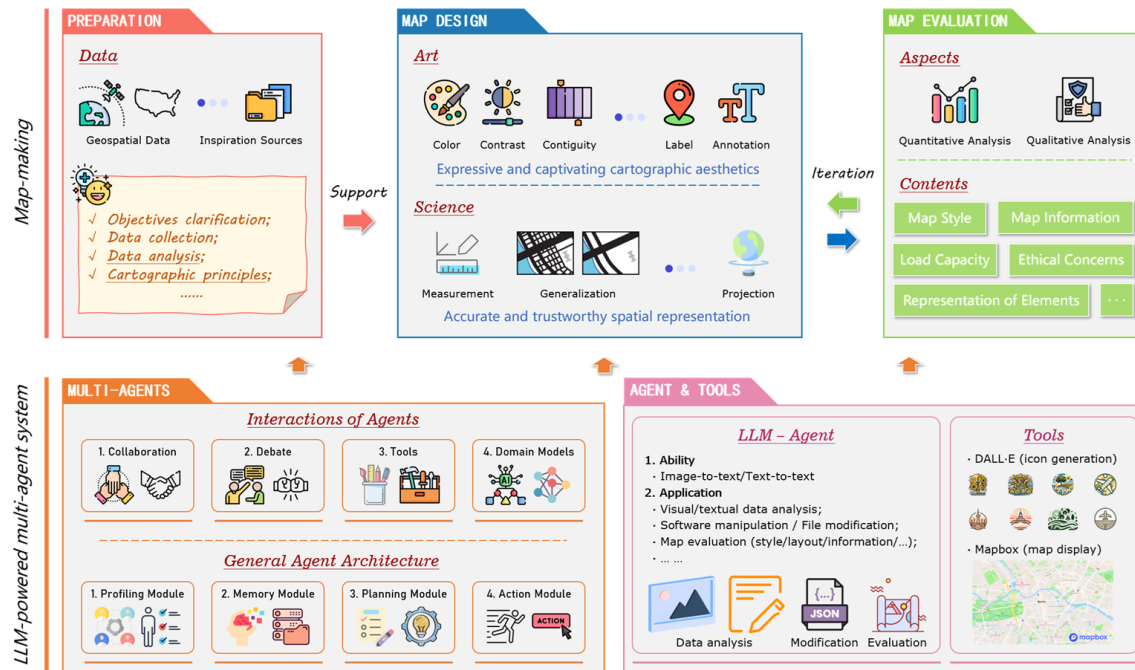Chenglong Wang[1,2], Yuhao Kang[3], Zhaoya Gong[1,2,#], Pengjun Zhao[1,2]

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Research Idea

Multimodal large language model (MLLM)-powered agents

We leverage the advanced multimodal understanding of MLLMs and the complex task management ability of autonomous multi-agent systems to automate the cartographic process.

Findings

Visually appealing and reliable maps

(a) Inspiration source: photographs

(b) Inspiration source: paintings

(c) Inspiration source: AI-generated maps

(d) Inspiration source: web maps