昆山杜克大学校企协同创新平台_挑战项目详情

| 合作方信息 | | | |
|---|---|---|---|
| 机构名称: | memU | | |
| 机构类型: | Corporate | | |
| 官网 / 官方账号链接: | https://github.com/NevaMind-AI/memU | | |
| 联系人: | Kiki 顾诗琪 | | |
| **项目信息** | | | |
| 项目类别: | 技术创新类 | | |
| 预期开启时间 | 2026 年 2 月 | 预计结束时间 | 2026 年 7 月 |

**机构介绍：**

memU 是一个面向 LLM 与 AI Agent 的智能体记忆框架（Agentic Memory Framework)。它能够接收多模态输入，将内容提取为细粒度的记忆单元（Memory Items)，并进一步自主组织聚类为结构化的记忆文件(Memory Files/Memory Categories)。

与传统仅依赖向量检索（Embedding Search）的 RAG 系统不同，memU 支持非向量检索，模型可以直接读取记忆文件本身。LLM 能以自然语言直接从语义的角度理解这些记忆文件，并通过"类别（Memory Files/Memory Categories）→记忆单元（Memory Items）→原始资源（Resource）"逐层回溯，实现深度检索（Deep Search）与精准推理。

**项目概述：**

该项目旨在通过真实代码库、开放式产品迭代与工程实践，为学生提供高水平的技术共创体验。在项目全过程中，学生将在导师与企业开发者的双重指导下，以协作者身份直接加入 memU 产品与开源生态的升级迭代。双方将共同规划若干「主题式共创方向」，围绕真实技术痛点或用户需求展开，形成结构化的学习路径与落地目标。参与方向包括但不限于:

- 基于实际需求提交高质量 PR（Pull Requests）；
- 新功能模块的研发与现有功能的拓展;
- 针对核心 memory logic、系统架构或工程流程进行优化;
- 对开源项目进行性能调优、文档补充与长期维护。

同时，项目还将联合开发：配套技术教程与工程实践指引；完整的项目文档、API 说明与开发者指南；可面向公众发布的成果内容，如技术文章、案例解析、项目展示等。相关成果将在 memU 官方公众号及其他公开渠道发布，推动学生实践成果在更广范围内被看见，并进一步促进开源社区的知识共享与可持续发展。

**合作方支持与资源：**

1. 技术资源支持：开放核心产品与开源项目代码及相关技术文档，为学生提供完整开发参考。
2. 专业导师与工程指导：指派技术团队成员进行代码审阅、技术辅导和项目路线指导。
3. 项目共创机制支持：协助设计主题式共创方向，提供真实业务场景和需求分析。
4. 开放学习与培训资源：提供技术教程、开发流程介绍及实践最佳实践培训。
5. 成果展示与传播支持：支持学生成果通过官方公众号、网站和社区渠道发布。
6. 深度参与与潜在延展支持：为表现优秀的学生提供长期合作或专项研发机会。

**其他说明：**

# DKU Co-Innovate Platform_Challenge Information

| **Partner Information** | | | |
|---|---|---|---|
| Organization Name: | memU | | |
| Organization Type: | Corporate | | |
| Official Website / Account Link(s): | https://github.com/NevaMind-AI/memU | | |
| Contact Person: | Kiki (Shiqi Gu) | | |
| **Project Information** | | | |
| Project Category: | Technology Innovation Project | | |
| Expected Start Time: | February 2026 | Expected End Time (or long-term partnership): | July 2026 |

**Partner Brief Intro:**

memU is an Agentic Memory Framework for LLMs and AI agents. It can ingest multimodal inputs, extract them into fine-grained Memory Items, and further organize and cluster them into structured Memory Files/Memory Categories.

Unlike traditional RAG systems that rely solely on vector retrieval (Embedding Search), memU supports non-vector retrieval, allowing the model to directly read the memory files themselves. LLMs can understand these memory files from a semantic, natural-language perspective, and trace back layer by layer from Memory Files/Categories → Memory Items → Original Resources, enabling Deep Search and more accurate reasoning.

**Project Overview**

This project aims to provide students with a high-level technical co-creation experience through a real codebase, open-ended product iteration, and engineering practice. Throughout the project, students - guided jointly by mentors and company developers - will join the memU product and open-source ecosystem as collaborators and directly contribute to upgrades and iterations.

Both sides will jointly plan several themed co-creation directions, targeting real technical pain points or user needs, and form a structured learning path with concrete deliverables. Participation may work on (but is not limited to):

- Submitting high-quality PRs (Pull Requests) based on real requirements;
- Developing new feature modules and extending existing capabilities;

- Optimizing core memory logic, system architecture, or engineering workflows;
- Performance tuning, documentation improvements, and long-term maintenance of the open-source project.

The project will also jointly develop supporting technical tutorials and engineering practice guides; complete project documentation, API references, and developer guides; and public-facing outputs such as technical articles, case analyses, and project showcases. Relevant achievements may be published via memU's official public channels and other platforms, increasing visibility of student work and contributing to sustainable knowledge sharing in the open-source community.

**Partner Support & Resources**

1. **Technical resources:** access to the core product and open-source codebase, plus technical documentation for development reference
2. **Professional mentorship & engineering guidance:** technical team members provide code reviews, technical coaching, and roadmap guidance
3. **Co-creation mechanism support:** co-design themed directions and provide real scenarios and requirement analysis
4. **Open learning & training resources:** tutorials, development process onboarding, and best-practice training
5. **Showcasing & dissemination:** support publication through official channels, websites, and community platforms
6. **Deep participation & possible extensions:** opportunities for long-term collaboration or special R&D projects for outstanding contributors

**Partner Support & Resources:**

1. Elderly Community Resources
   - Connect with beneficiaries from Xin'ao's presbyopia/cataract programs to record voice messages for the toy.
   - Organize beneficiaries to participate in the "光明编织社团," knitting sweaters for the toy to complete intergenerational interaction.
2. Technical & Innovation Support
   - Support the development, debugging, and refinement of the toy's embedded AI interactive functions (Q&A and singing).
3. Project Organization & Community Management
   - Provide a community organization platform and manage elderly participation to ensure orderly implementation.
   - Assist coordination and communication with hospitals and volunteer teams to enable on-the-ground companionship activities.

**Additional Notes**: