

Reading List

1. LLM Agent Frameworks

- Junyu Luo, et al. Large Language Model Agent: A Survey on Methodology, Applications and Challenges. <https://arxiv.org/abs/2503.21460>, 2025.
- Shen et al. From Mind to Machine: The Rise of Manus AI as a Fully Autonomous Digital Agent. <https://arxiv.org/abs/2505.02024>, 2025.

2. Multi-Agent Systems

- Taicheng Guo, et al. Large Language Model Based Multi-Agents: A Survey of Progress and Challenges. <https://arxiv.org/abs/2402.01680>, 2024.
- Hong et al. MetaGPT: Meta-Programming for A Multi-Agent Collaborative Framework. <https://arxiv.org/abs/2308.00352>, 2024.

3. Human-Agent Collaboration

- Henry Peng Zou, et al. LLM-Based Human-Agent Collaboration and Interaction Systems: A Survey. <https://arxiv.org/abs/2505.00753>, 2025.
- Daoguang Zan, et al. CodeS: Natural Language to Code Repository via Multi-Layer Sketch. <https://arxiv.org/abs/2403.16443>, 2024

4. Requirement Engineering

- Lezhi Ma, et al. Specgen: Automated generation of formal program specifications via large language models. <https://arxiv.org/2401.08807>, 2024.
- Dongming Jin, et al. MARE: multi-agents collaboration framework for requirements engineering. <https://arxiv.org/abs/2405.03256>, 2024.

5. Code Generation

- Juyong Jiang, et al. A survey on large language models for code generation. <https://arxiv.org/abs/2406.00515>, 2024.
- Zhang et al. CodeAgent: Enhancing Code Generation with Tool-Integrated Agent Systems for Real-World Repo-level Coding Challenges. <https://arxiv.org/abs/2401.07339>. 2024

6. Static Code Checking

- Wang et al. A Contemporary Survey of Large Language Model Assisted Program Analysis. <https://arxiv.org/abs/2502.18474>.
- Li et al., LLM-Assisted Static Analysis for Detecting Security Vulnerabilities. <https://arxiv.org/abs/2405.17238>. 2024

7. Testing

- Alshahwan, et al. Automated Unit Test Improvement using Large Language Models at Meta. <https://arxiv.org/abs/2402.09171>. 2024.
- Juan Altmayer Pizzorno and E. Berger. Coverup: Coverageguided llm-based test generation. <https://arxiv.org/abs/2403.16218>, 2024.

8. Debugging

- Yihao Qin et al. Agentfl: Scaling Llm-based fault localization to project-level context. <https://arxiv.org/abs/2403.16362>, 2024.
- Cheryl Lee, et al. A unified debugging approach via Llm-based multi-agent synergy. <https://arxiv.org/abs/2404.17153>, 2024.

9. Evaluations

- Carlos E. Jimenez, et al. Swe-bench: Can language models resolve real-world github issues? <https://arxiv.org/abs/2310.06770>, 2023.
- Chunqiu Steven Xia, et al. Agentless: Demystifying Llm-based software engineering agents. <https://arxiv.org/abs/2407.01489>, 2024.

10. End-to-End Software Development

- Zhang et al. Empowering Agile-Based Generative Software Development through Human-AI Teamwork. <https://arxiv.org/abs/2407.15568>. 2024
- Liu et al. Large Language Model-Based Agents for Software Engineering: A Survey. <https://arxiv.org/abs/2409.02977>. 2024