References

[1] L. Wang, C. Ma, X. Feng, Z. Zhang, H. ran Yang, J. Zhang, Z.-Y. Chen, J. Tang, X. Chen, Y. Lin, W. X. Zhao, Z. Wei, and J. rong Wen, "A survey on large language model based autonomous agents," *ArXiv*, vol. abs/2308.11432, 2023. [Online]. Available: https://api.semanticscholar.org/CorpusID:261064713

[2] M. J. Kim, M. E. Cho, and H. J. Jun, "Developing design solutions for smart homes through user-centered scenarios," *Frontiers in psychology*, vol. 11, p. 335, 2020.

[3] "Can an intelligent personal assistant (ipa) be your friend? para-friendship development mechanism between ipas and their users," *Computers in Human Behavior*, vol. 111, p. 106412, 2020.

[4] R. D. Manu, S. Kumar, S. Snehashish, and K. Rekha, "Smart home automation using iot and deep learning," *International Research Journal of Engineering and Technology*, vol. 6, no. 4, pp. 1–4, 2019.

[5] P. J. Rani, J. Bakthakumar, B. P. Kumaar, U. P. Kumaar, and S. Kumar, "Voice controlled home automation system using natural language processing (nlp) and internet of things (iot)," in *2017 Third International Conference on Science Technology Engineering & Management (ICONSTEM)*, 2017, pp. 368–373.

[6] E. Luger and A. Sellen, "Like having a really bad pa: The gulf between user expectation and experience of conversational agents," in *Proceedings of CHI 2016*, 2016.

[7] E. King, H. Yu, S. Lee, and C. Julien, "Sasha: creative goal-oriented reasoning in smart homes with large language models," *arXiv preprint arXiv:2305.09802*, 2023.

[8] H. Yu, J. Hua, and C. Julien, "Dataset: Analysis of IFTTT recipes to study how humans use internet-of-things (iot) devices," *CoRR*, vol. abs/2110.00068, 2021.

[9] "Smartthings smartapp documentation," https://developer.smartthings.com/docs/connected-services/create-a-smartapp, accessed: 2023-10-27.

[10] D. Dalal and B. V. Galbraith, "Evaluating sequence-to-sequence learning models for if-then program synthesis," *CoRR*, vol. abs/2002.03485, 2020. [Online]. Available: https://arxiv.org/abs/2002.03485

[11] J. Wei, X. Wang, D. Schuurmans, M. Bosma, F. Xia, E. Chi, Q. V. Le, D. Zhou *et al.*, "Chain-of-thought prompting elicits reasoning in large language models," *Advances in Neural Information Processing Systems*, vol. 35, pp. 24 824–24 837, 2022.

[12] T. Kojima, S. S. Gu, M. Reid, Y. Matsuo, and Y. Iwasawa, "Large language models are zero-shot reasoners," *Advances in neural information processing systems*, vol. 35, pp. 22 199–22 213, 2022.

[13] S. Yao, D. Yu, J. Zhao, I. Shafran, T. L. Griffiths, Y. Cao, and K. Narasimhan, "Tree of thoughts: Deliberate problem solving with large language models," *arXiv preprint arXiv:2305.10601*, 2023.

[14] S. Yao, J. Zhao, D. Yu, N. Du, I. Shafran, K. Narasimhan, and Y. Cao, "React: Synergizing reasoning and acting in language models," *arXiv preprint arXiv:2210.03629*, 2022.

[15] S. G. Patil, T. Zhang, X. Wang, and J. E. Gonzalez, "Gorilla: Large language model connected with massive apis," *arXiv preprint arXiv:2305.15334*, 2023.

[16] Y. Qin, S. Liang, Y. Ye, K. Zhu, L. Yan, Y. Lu, Y. Lin, X. Cong, X. Tang, B. Qian, S. Zhao, R. Tian, R. Xie, J. Zhou, M. Gerstein, D. Li, Z. Liu, and M. Sun, "Toolllm: Facilitating large language models to master 16000+ real-world apis," 2023.

[17] Y. Ge, W. Hua, J. Ji, J. Tan, S. Xu, and Y. Zhang, "Openagi: When llm meets domain