

DAFTAR PUSTAKA

- [1] L. Vitéková, C. Eichhorn, J. Pirker, and D. A. Plecher, "Dynamic Difficulty Adjustment in Serious Games: A Literature Review," Jan. 01, 2026, *Multidisciplinary Digital Publishing Institute (MDPI)*. doi: 10.3390/info17010096.
- [2] C. Yuksel, "Skill Based Matchmaking for Competitive Two Player Games," *Proceedings of the ACM on Computer Graphics and Interactive Techniques*, vol. 7, no. 1, May 2024, doi: 10.1145/3651303.
- [3] P. D. Paraschos and D. E. Koulouriotis, "Fuzzy Logic Based Dynamic Difficulty Adjustment for Adaptive Game Environments," *Electronics (Switzerland)*, vol. 14, no. 1, Jan. 2025, doi: 10.3390/electronics14010146.
- [4] M. I. Pangwangun, "Penerapan Dynamic Difficulty Adjustment Berdasarkan Perbandingan Skor Dengan Algoritma Fuzzy Mamdani, Sugeno, Dan Tsukamoto Pada Game Top Down Menggunakan Godot," 2025.
- [5] F. Annisa Damastuti, K. Firmansyah, Y. Miftachul Arif, T. Dutono, A. Barakbah, and M. Hariadi, "Dynamic Level of Difficulties Using Q Learning and Fuzzy Logic," *IEEE Access*, vol. 12, pp. 137775–137789, 2024, doi: 10.1109/ACCESS.2024.3457801.
- [6] Hang, "The Role of Flow in Enhancing Customer Experience Across the Customer Journey in The Gaming Industry," 2025.
- [7] K. Reya Wisinggya, H. Haryanto, E. Mulyanto, and E. Dolphina, "TINGKAT KESULITAN DINAMIS MENGGUNAKAN LOGIKA FUZZY PADA GAME MUSIK TRADISIONAL JAWA TENGAH," Online, 2021.
- [8] D. S. O. Soedargo and H. Junaedi, "Dynamic Difficulty Adjustment Berbasis Logika Fuzzy Untuk Procedural Content Generation Pada Permainan Roguelike," *Teknika*, vol. 11, no. 2, pp. 98–105, Jun. 2022, doi: 10.34148/teknika.v11i2.468.
- [9] K. Chrysafiadi, M. Kamitsios, and M. Virvou, "Fuzzy based dynamic difficulty adjustment of an educational 3D game," *Multimed. Tools Appl.*, vol. 82, no. 18, pp. 27525–27549, Jul. 2023, doi: 10.1007/s11042-023-14515-w.
- [10] A. K. Das, B. Pratihari, and D. K. Pratihari, "Evolving fuzzy reasoning approach using a novel nature inspired optimization tool," *Expert Syst. Appl.*, vol. 170, p. 114577, May 2021, doi: 10.1016/J.ESWA.2021.114577.
- [11] A. Hamam et al., "A comparison of Mamdani and Sugeno fuzzy inference systems for evaluating the quality of experience of Hapto Audio Visual

- applications," in *Proc. IEEE HAVE*, Ottawa, ON, Canada, Oct. 2008, pp. 87–92, doi: 10.1109/HAVE.2008.4685304.
- [12] Laksono, Samsuryadi, and Buchari, "Penggunaan Metode Fuzzy Mamdani dan Sugeno dalam Mengatur Pola Serangan Musuh pada Media Permainan 2 Dimensi," Universitas Sriwijaya, 2021.
 - [13] ProMedi24 1, "HordeSurvivalGame: Implementation of DDA in Godot Engine," GitHub Repository, Apr. 2024. [Online]. Available: <https://github.com/ProMedi24 1/HordeSurvivalGame>
 - [14] E. J. Rechy Ramirez, "A Scoping Review on Fuzzy Logic Used in Serious Games," *Technologies*, vol. 13, no. 10, p. 448, Oct. 2025, doi: 10.3390/technologies13100448.
 - [15] "Fuzzy Logic Based Dynamic Difficulty Adjustment in First Person Shooters," in *Proc. IEEE Int. Conf. Adv. Comput. Sci.*, Jakarta, Indonesia, Dec. 2025, pp. 102–108.
 - [16] L. Vitéková, C. Eichhorn, and D. A. Plecher, "Temporal difficulty curves in adaptive role playing games," *MDPI Games*, vol. 17, no. 2, pp. 15–29, Feb. 2026.