

## DAFTAR PUSTAKA

- Alphatora, W. M., Atmaja, P. W., & Aditiawan, F. P. (2021). Game Edukasi “River Guard” Berbasis Augmented Reality dengan Metode Dynamic Difficulty Adjustment. *Prosiding Seminar Nasional Informatika Bela Negara*, 2, 73–77. <https://doi.org/10.33005/santika.v2i0.109>
- Alvian, M. D., & Haryanto, H. (2024). Implementasi Certainty Factor untuk Agen Cerdas rekomendasi pemilihan senjata pada Game Top Down Shooter. *Techno Creative*, 2(2), 75–81. <https://abdimasku.lppm.dinus.ac.id/index.php/technocreative/article/view/2925>
- Ardiadna, R. J., & Setiawan, A. (2023). Adaptive Difficulty in Earthquake Mitigation Game Using Fuzzy Mamdani. *Recursive Journal of Informatics*, 1(1), 35–46. <https://doi.org/10.15294/rji.v1i1.66543>
- Athiyah, U., Handayani, A. P., Aldean, M. Y., Putra, N. P., & Ramadhani, R. (2021). Sistem Inferensi Fuzzy: Pengertian, Penerapan, dan Manfaatnya. *Journal of Dinda: Data Science, Information Technology, and Data Analytics*, 1(2), 73–76. <https://doi.org/10.20895/dinda.v1i2.201>
- Azra, A. A., & Harisa, A. B. (2024). Alternating Sword Controller in First-Person Action Game using Fuzzy Logic for Adaptive Enemy. *Journal of Games, Game Art, and Gamification*, 9(2), 57–63. <https://doi.org/10.21512/jggag.v9i2.10549>
- Baskara, M. R. (2024). *Penentuan background musik pada game berdasarkan player performance menggunakan metode fuzzy sugeno*. Tugas Akhir, Malang: Universitas Islam Negeri Maulana Malik Ibrahim. <http://etheses.uin-malang.ac.id/66193/>
- Borman, R.I., & Purwanto, Y. (2019). Implementasi Multimedia Development Life Cycle pada Pengembangan Game Edukasi. *Jurnal Edukasi dan Penelitian Informatika*, 5(2), 119–124.
- Caesar, R. (2015). Kajian Pustaka Perkembangan Genre Games Dari Masa Ke Masa. *Journal of Animation and Games Studies*, 1(2), 113–134.

- Chrysafiadi, K., Kamitsios, M., & Virvou, M. (2023). Fuzzy-based dynamic difficulty adjustment of an educational 3D-game. *Multimedia Tools and Applications*, 82(18), 27525–27549. <https://doi.org/10.1007/s11042-023-14515-w>
- Clarita, A. R. N., Fadhillah, F. V., Nurhaliza, Z., & Rilvani, E. (2025). Komparasi Struktur Direktori pada Sistem Operasi Mobile Android dan IOS. *Scientica: Jurnal Ilmiah Sains Dan Teknologi*, 3(3), 76–86.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper & Row.
- Damastuti, F. A., Firmansyah, K., Arif, Y. M., Dutono, T., Barakbah, A., & Hariadi, M. (2024). Dynamic Level of Difficulties Using Q-Learning and Fuzzy Logic. *IEEE Access*, 12, 137775–137789. <https://doi.org/10.1109/ACCESS.2024.3457801>
- Fisher, N., & Kulshreshth, A. K. (2024). Exploring Dynamic Difficulty Adjustment Methods for Video Games. *Virtual Worlds*, 3(2), 230–255. <https://doi.org/10.3390/virtualworlds3020012>
- Games Learning Society. (2024, Maret 13). What is a top-down game?. *Games Learning Society*. <https://www.gameslearningsociety.org/what-is-a-top-down-game/>
- García-Ramón, R. D., Rechy-Ramirez, E. J., Alonso-Valerdi, L. M., & Marin-Hernandez, A. (2024). Engagement Analysis Using Electroencephalography Signals in Games for Hand Rehabilitation with Dynamic and Random Difficulty Adjustments. *Applied Sciences (Switzerland)*, 14(18). <https://doi.org/10.3390/app14188464>
- Ghiffary, F. D., Zahro, H. Z., & Wahyuni, F. S. (2024). Perancangan Game berbasis Android “Knight the Devil Slayer” menggunakan Metode Pathfinding. *Jurnal Mahasiswa Teknik Informatika (JATI)*, 8(6), 12377–12384. <https://doi.org/10.36040/jati.v8i6.10536>
- Hellmann, M. (2001). *Fuzzy logic introduction*. Université de Rennes.

- Husain, S., Ahmad, Y., Sharma, M., & Ali, S. (2017). *Comparative Analysis of Defuzzification Approaches from an Aspect of Real life problem*. 19(6), 19–25.
- Julianto, A. (2020, Agustus 23). Mengenal berbagai perspektif kamera video game. *Gamebrott*. <https://gamebrott.com/mengenal-berbagai-perspektif-kamera-video-game/>
- Kautsar, A. D. A., Bustomi, T., & Andrijasa, M. F. (2024). Pembangunan game “Recon Duty” dengan Godot Engine. *Jurnal Vokasi Teknik*, 2(2), 63–76.
- Krisdiawan, R. A., Sugiharto, T., & Nugraha, N. (2023). Terapi Rehabilitasi Dyslexia Berbasis Mobile Game dengan Dynamic Difficulty Adjustment (DDA) Menggunakan Algoritma Fuzzy Sugeno. *Jurnal Teknologi Informatika Dan Komputer*, 9(2), 975–991. <https://doi.org/10.37012/jtik.v9i2.1837>
- Kynta, D. P., & Pribadi, M. R. (2025). Implementation of Fuzzy Logic in Educational Game on Manners and Morals for Kids Using Godot Engine. *Journal of Artificial Intelligence and Software Engineering (J-AISE)*, 5(1), 339–346. <https://doi.org/10.30811/jaise.v5i1.6458>
- Lobo, P., Lima, R., Branco, D., & i Badia, S. B. (2024). Flow Optimizer: A Dynamic Difficulty Adjustment Framework for Serious Games in Neurorehabilitation. In *2024 IEEE 12th International Conference on Serious Games and Applications for Health (SeGAH)*(pp. 1–8). <https://doi.org/10.1109/SeGAH61285.2024.10639576>
- Medina, M. (2025, Januari 16). Prediksi industri game Indonesia 2025 dari CEO studio game lokal. *GGWP.ID*. <https://ggwp.id/media/geek/game/prediksi-industri-game-indonesia-2025>
- Mohd, T. K., Bravo-Garcia, F., Love, L., Gujadhur, M., & Nyadu, J. (2023). Analyzing Strengths and Weaknesses of Modern Game Engines. *International Journal of Computer Theory and Engineering*, 15(1), 54–60. <https://doi.org/10.7763/IJCTE.2023.V15.1330>

- Paraschos, P. D., & Koulouriotis, D. E. (2025). Fuzzy Logic-Based Dynamic Difficulty Adjustment for Adaptive Game Environments. *Electronics (Switzerland)*, *14*(1). <https://doi.org/10.3390/electronics14010146>
- Pradana, Y. S. A., Widodo, D. W., & Sulaksono, J. (2024). Implementasi Metode Pathfinding Dengan Algoritma A-Star Pada Game Action 2D. *INOTEK*, *8*, 1613–1618.
- Pranata, J. (2016). *DDA Berbasis Logika Fuzzy untuk Menentukan Skor Pada Game Petualangan*. Tesis, Surabaya: Intitut Teknologi Sepuluh Nopember. <https://repository.its.ac.id/1271/>
- Pratama, M., Yanfi, Y., & Nusantara, P. D. (2023). WizardOfMath: A top-down puzzle game with RPG elements to hone the player's arithmetic skills. *Procedia Computer Science*, *216*, 338–345. <https://doi.org/10.1016/j.procs.2022.12.144>
- Rhamadanty, S. (2024, Maret 14). Pendapatan diprediksi US\$ 367 juta, industri game Indonesia optimistis berkembang. *Kontan.co.id*. <https://industri.kontan.co.id/news/pendapatan-diprediksi-us-367-miliar-industri-game-indonesia-optimistis-berkembang>
- Rizal, A., Astuti, Y. P., & Setiawan, A. (2022). Tingkat Kesulitan Adaptif pada Android Game bertema Flora Fauna Endemik Indonesia dengan Fuzzy Logic. *Jurnal Buana Informatika*, *13*(1), 1–10. <https://doi.org/10.24002/jbi.v13i1.4946>
- Rogers, S. (2010). *Level up! : The guide to great video game design*. John Wiley & Sons.
- Romero-Mendez, E. A., Santana-Mancilla, P. C., Garcia-Ruiz, M., Montesinos-López, O. A., & Anido-Rifón, L. E. (2023). The Use of Deep Learning to Improve Player Engagement in a Video Game through a Dynamic Difficulty Adjustment Based on Skills Classification. *Applied Sciences (Switzerland)*, *13*(14). <https://doi.org/10.3390/app13148249>
- Saputra, R. (2018). *Implementasi Dynamic Difficulty Adjustment pada Racing Game menggunakan Metode Fuzzy*. Tugas Akhir, Malang: Universitas Brawijaya. <https://repository.ub.ac.id/id/eprint/13644/>

- Seyderhelm, A. J. A., & Blackmore, K. L. (2024). Dynamic Adaptive Surveillance Training in a Virtual Environment Using Real-Time Cognitive Load and Performance. *International Journal of Serious Games*, 11(3), 109–133. <https://doi.org/10.17083/ijsg.v11i3.733>
- Shagianto, I. I., Wiriasto, G. W., Budiman, D. F., Misbahuddin, & Seniari, N. M. (2023). Aplikasi Game berbasis Andorid 2D dengan Logika Fuzzy pada NPC (Non-Player Character). *Journal of Electrical Engineering and Information Technology*, 1(1), 41–56.
- Soedargo, D. S. O., & Junaedi, H. (2022). Dynamic Difficulty Adjustment Berbasis Logika Fuzzy Untuk Procedural Content Generation Pada Permainan Roguelike. *Teknika*, 11(2), 98–105. <https://doi.org/10.34148/teknika.v11i2.468>
- Sutanto, K., & Suharjito, S. (2014). Dynamic Difficulty Adjustment in Game Based on Type of Player with ANFIS Method. *Article in Journal of Theoretical and Applied Information Technology*, 65(1), 254–260.
- Toxigon. (2025, Maret 28). Godot Engine vs. Unity: Choosing the Right Game Engine. *Toxigon Blog*. [https://toxigon.com/godot-engine-vs-unity-which-game-engine-is-right-for-you#google\\_vignette](https://toxigon.com/godot-engine-vs-unity-which-game-engine-is-right-for-you#google_vignette)
- Vang, C. (2022). The Impact of Dynamic Difficulty Adjustment on Player Experience in Video Games. *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal*, 9(1). <https://doi.org/10.61366/2576-2176.1105>
- Wisinggya, K. R., Haryanto, H., Sutojo, T., Mulyanto, E., & Dolphina, E. (2021). Tingkat Kesulitan Dinamis Menggunakan Logika Fuzzy pada Game Musik Tradisional Jawa Tengah. *Jurnal Teknik Elektro, Teknologi Informasi Dan Komputer (ELTIKOM)*, 5(2), 56–64.
- Ye, R. (2017). *Android system programming : porting, customizing, and debugging Android HAL*. Packt Publishing.
- Zohaib, M. (2018). Dynamic Difficulty Adjustment (DDA) in Computer Games: A Review. *Advances in Human-Computer Interaction*, 2018, 1–12. <https://doi.org/10.1155/2018/5681652>