

Learning Based Book and Library Recommendation Application Using Content-Based Filtering Method. This funding has provided the necessary resources to advance the author's research and explore innovative solutions to the challenges faced by the technology industry and digital education in Indonesia. The unwavering trust and support from PT.Dicoding Akademi Indonesia has not only facilitated the development of this research, but also fostered a spirit of innovation and academic excellence. We greatly appreciate their commitment to empowering researchers and driving impactful progress in this field.

REFERENCE

- [1] S. Rakesh, "Movie Recommendation System Using Content Based Filtering," *Al-Bahir J. Eng. Pure Sci.*, vol. 4, no. 1, 2023, doi: 10.55810/2313-0083.1043.
- [2] T. Ridwansyah, B. Subartini, and S. Sylviani, "Penerapan Metode Content-Based Filtering pada Sistem Rekomendasi," *Math. Sci. Appl. J.*, vol. 4, no. 2, pp. 70–77, 2024.
- [3] A. Rianti, N. W. A. Majid, and A. Fauzi, "Machine Learning Journal Article Recommendation System Using Content Based Filtering," *JUTI J. Ilm. Teknol. Inf.*, vol. 22, no. 1, pp. 1–10, 2024.
- [4] F. Maulana and E. B. Setiawan, "Performance of Deep Feed-Forward Neural Network Algorithm Based on Content-Based Filtering Approach," *INTENSIF J. Ilm. Penelit. dan Penerapan Teknol. Sist. Inf.*, vol. 8, no. 2, pp. 278–294, 2024, doi: 10.29407/intensif.v8i2.22904.
- [5] H. Haryanto and A. Harits, "Otomatisasi Konten Statis dan Perilaku Dinamis dari Web E-Commerce Menggunakan Metode Content Based Filtering PT Multi Sinar Teknik," *sudo J. Tek. Inform.*, vol. 3, no. 3, pp. 106–112, 2024, doi: 10.56211/sudo.v3i3.421.
- [6] A. A. Huda, R. Fajarudin, and A. Hadinegoro, "Sistem Rekomendasi Content-based Filtering Menggunakan TF-IDF Vector Similarity Untuk Rekomendasi Artikel Berita," *Build. Informatics, Technol. Sci.*, vol. 4, no. 3, pp. 1679–1686, 2022, doi: 10.47065/bits.v4i3.2511.
- [7] A. Ikhwan and Z. Khalilah, "Sistem Informasi Pengolahan Data Rekomendasi Teknis Berbasis Web," *sudo J. Tek. Inform.*, vol. 2, no. 1, pp. 1–10, 2023, doi: 10.56211/sudo.v2i1.192.
- [8] Y. Sari, A. R. Baskara, P. B. Prakoso, N. Royani, U. L. Mangkurat, and P. Korespondensi, "Perbandingan Metode Pembobotan Tf-Rf Dan Tf-Idf Dengan Dikombinasikan Dengan Weighted Tree Similarity Comparison of Tf-Rf and . Weighting Methods Tf-Idf With Combination With Weighted Tree Similarity for a Book," vol. 9, no. 3, 2022, doi: 10.25126/jtiik.202295709.
- [9] S. Purwaningrum, A. Susanto, and A. Kristiningsih, "Synonym Recognition Influence in Text Similarity Detection Using Winnowing and Cosine Similarity," *J. Nas. Tek. Elektro dan Teknol. Inf.*, vol. 12, no. 3, pp. 219–226, 2023.
- [10] E. K. A. Rahmawati, G. S. Nurohim, C. Agustina, and Z. Muttaqin, "Development of Machine Learning Model to Predict Hotel Room Reservation Cancellations," vol. 11, no. 2, 2024.
- [11] A. Trisnadoli and D. Yanti, "Analysis of Prototyping Methods Implementation for Library Information Systems Development in SMAN 3 Bengkalis," *J. Nas. Pendidik. Tek. Inform.*, vol. 11, no. 3, pp. 280–289, 2022, doi: 10.23887/janapati.v11i3.50160.
- [12] K. Febriani and K. Febriani, "Prediksi permintaan batu bara menggunakan machine learning," pp. 65–77, 2022.
- [13] D. R. P. Noordi, H. Hasanah, and S. Sumarlinda, "Marvel Movie Recommendation System Using Hybrid Item-Based and Content-Based Filtering Methods," *TIERS Inf. Technol. J.*, vol. 5, no. 1, pp. 13–19, 2024, doi: 10.38043/tiers.v5i1.5209.
- [14] A. Felfernig, M. Wundara, T. N. T. Tran, V. M. Le, S. Lubos, and S. Polat-Erdeniz, "Sports recommender systems: overview and research directions," *J. Intell. Inf. Syst.*, vol. 62, no. 4, pp. 1125–1164, 2024, doi: 10.1007/s10844-024-00857-w.
- [15] N. P. Yunita, "Aplikasi Pencarian Hadis Menggunakan Vector Space Model Dengan Pembobotan TF-IDF Dan Confix-Stripping Stemmer," *J. Teknol. Inf. dan Ilmu Komput.*, vol. 10, no. 3, pp. 665–676, 2023, doi: 10.25126/jtiik.20231036736.
- [16] S. A. Gunarto, E. S. Honggara, and D. D. Purwanto, "Website Sistem Rekomendasi dengan Content Based Filtering pada Produk Perawatan Kulit," *J. Sist. dan Teknol. Inf.*, vol. 11, no. 3, p. 399, 2023, doi: 10.26418/justin.v11i3.59049.
- [17] V. N. November, "pemrograman Machine Learning , penulis memutuskan untuk melakukan studi Academy dan menyelesaikan proyek dengan judul ‘ MOVIE MU ’ . Di era digital," vol. 4, no. 2, pp. 22–32, 2024.

- [18] C. H. Saputra, "Integrasi Audit dan Teknik *Clustering* untuk Segmentasi dan Kategorisasi Aktivitas Log," *J. Teknol. Inf. dan Ilmu Komput.*, vol. 11, no. 1, pp. 209–214, 2024, doi: 10.25126/jtiik.20241118071.
- [19] N. W. Utami, I. K. R. Arthana, and I. G. M. Darmawiguna, "Evaluasi Usability Pada E-Learning Universitas Pendidikan Ganesha Dengan Metode Usability Testing," *J. Nas. Pendidik. Tek. Inform.*, vol. 9, no. 1, p. 107, 2020, doi: 10.23887/janapati.v9i1.23663.



NOVIT SAPUTRI is an active student of the Bachelor of Information Systems Program, Faculty of Information Technology, Digital Indonesia University of Technology. In 2024, he participated in the Merdeka Belajar Kampus Merdeka (MBKM) Batch 2 program and was selected as a participant in Bangkit Academy, an independent

study program resulting from the collaboration of Kemendikbudristek with Google, GoTo, and Traveloka. In this program, he took the Machine Learning learning path organized by PT Dicoding Akademi Indonesia. During the program, he learned various machine learning concepts in theory and practice, and developed a final project (Capstone Project) which was then used as the basis for writing this journal.

PULUT SURYATI, Lecturer at the Faculty of Information Technology, University of Digital Indonesia (UTDI). Who is also Novit Saputri's supervisor in completing this final project research. Pulut Suryati has several articles related to Computer Science.