UNIVERSITAS
GADJAH MADA
Studi Komparatif Arsitektur Deep Learning Berbasis BiLSTM untuk Klasifikasi Konten YouTube Tidak Pantas bagi Anak-Anak dan Implementasinya pada Sistem Berbasis Web
Saidil Halim, Divi Galih Prasetyo Putri, S.Kom., M.Kom., Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

[1] DataReportal, "YouTube Users, Stats, Data, Trends, and More — DataReportal – Global Digital Insights." Accessed: Apr. 27, 2026. [Online]. Available: https://datareportal.com/essential-youtube-stats

[2] F. Eltaher *et al.*, "Protecting Young Users on Social Media: Evaluating the Effectiveness of Content Moderation and Legal Safeguards on Video Sharing Platforms," May 2025.

[3] E. Zahrani Syaripuddin, V. Syahrani, A. Haliq, and U. Negeri Makassar, "Analisis Pengaruh Konten Digital YouTube terhadap Gaya Bahasa Anak-anak Usia Dini: Studi Kasus pada Anak Usia 3 dan 7 Tahun," 2025.

[4] S. I. Alqahtani, W. M. S. Yafooz, A. Alsaeedi, L. Syed, and R. Alluhaibi, "Children's Safety on YouTube: A Systematic Review," Mar. 01, 2023, *MDPI*. doi: 10.3390/app13064044.

[5] M. Sam'an and K. Imaddudin, "Hybrid deep learning model for YouTube spam comment detection," *International Journal of Electrical and Computer Engineering*, vol. 14, no. 3, pp. 3313–3319, Jun. 2024, doi: 10.11591/ijece.v14i3.pp3313-3319.

[6] Y. Kim, "Convolutional Neural Networks for Sentence Classification," in *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, Stroudsburg, PA, USA: Association for Computational Linguistics, 2014, pp. 1746–1751. doi: 10.3115/v1/D14-1181.

[7] J. Deng, L. Cheng, and Z. Wang, "Attention-based BiLSTM fused CNN with gating mechanism model for Chinese long text classification," *Comput. Speech Lang.*, vol. 68, Jul. 2021, doi: 10.1016/j.csl.2020.101182.

[8] L. Binh *et al.*, "Samba: Identifying Inappropriate Videos for Young Children on YouTube," in *International Conference on Information and Knowledge*

UNIVERSITAS
GADJAH MADA
Studi Komparatif Arsitektur Deep Learning Berbasis BiLSTM untuk Klasifikasi Konten YouTube Tidak Pantas bagi Anak-Anak dan Implementasinya pada Sistem Berbasis Web
Saidil Halim, Divi Galih Prasetyo Putri, S.Kom., M.Kom., Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Management, Proceedings, Association for Computing Machinery, Oct. 2022, pp. 88–97. doi: 10.1145/3511808.3557442.

[9] M. Gkolemi, P. Papadopoulos, E. Markatos, and N. Kourtellis, "YouTubers Not madeForKids: Detecting Channels Sharing Inappropriate Videos Targeting Children," in *ACM International Conference Proceeding Series*, Association for Computing Machinery, Jun. 2022, pp. 370–381. doi: 10.1145/3501247.3531556.

[10] S. Tirpude, A. Tirmanwar, S. Bhuwan, A. Sachan, and P. Borkar, "A BiLSTM-Based Framework for Toxic Comment Classification," in *1st IEEE International Conference on Data Science and Intelligent Network Computing, ICDSINC 2025*, Institute of Electrical and Electronics Engineers Inc., 2025, pp. 641–646. doi: 10.1109/ICDSINC66221.2025.11448169.

[11] M. Khairul Anam, L. F. Lhaura Van, H. Hamdani, M. Bambang Firdaus, I. Syahputra, and Y. Irawan, "SARA DETECTION ON SOCIAL MEDIA USING DEEP LEARNING ALGORITHM DEVELOPMENT."

[12] S. Ghosh, A. Chaki, and A. Kudeshia, "Cyberbully Detection Using 1D-CNN and LSTM," 2021, pp. 295–301. doi: 10.1007/978-981-33-4866-0_37.

[13] A. C. Sari *et al.*, "Comparative Analysis of LSTM and BiLSTM for Sexual Harassment Classification on Indonesian Social Media," in *7th International Seminar on Research of Information Technology and Intelligent Systems: Advanced Intelligent Systems in Contemporary Society, ISRITI 2024 - Proceedings*, Institute of Electrical and Electronics Engineers Inc., 2024, pp. 995–1000. doi: 10.1109/ISRITI64779.2024.10963555.

[14] K. Lakshminadh, V. Sravanthi, K. Koushik, and C. S. Bhaskar, "Enhancing Profanity Detection in Textual Data Using Bidirectional Long Short-Term Memory Networks," in *International Conference on Self Sustainable Artificial Intelligence Systems, ICSSAS 2023 - Proceedings*, Institute of Electrical and Electronics Engineers Inc., 2023, pp. 1–6. doi: 10.1109/ICSSAS57918.2023.10331695.

UNIVERSITAS
GADJAH MADA
Studi Komparatif Arsitektur Deep Learning Berbasis BiLSTM untuk Klasifikasi Konten YouTube Tidak Pantas bagi Anak-Anak dan Implementasinya pada Sistem Berbasis Web
Saidil Halim, Divi Galih Prasetyo Putri, S.Kom., M.Kom., Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[15] M. H. Abd Alsadh *et al.*, "Cyberbullying and Harassment Pattern Recognition from Social Media Data Using BiLSTM-CNN Hybrid Model," *Procedia Comput. Sci.*, vol. 275, pp. 833–842, 2026, doi: 10.1016/j.procs.2026.01.096.

[16] S. S. J. Soloman and N. Baydeti, "Exploring Hate Speech and Offensive Language in Social Media: Insights from Twitter Textual Content with Stacked BiLSTM," in *2025 International Conference on Intelligent Computing and Knowledge Extraction, ICICKE 2025*, Institute of Electrical and Electronics Engineers Inc., 2025. doi: 10.1109/ICICKE65317.2025.11136762.

[17] J. Arthurs, S. Drakopoulou, and A. Gandini, "Researching YouTube," Feb. 01, 2018, *SAGE Publications Ltd*. doi: 10.1177/1354856517737222.

[18] B. Burroughs, "Youtube kids: The app economy and mobile parenting," *Social Media and Society*, vol. 3, no. 2, Apr. 2017, doi: 10.1177/2056305117707189.

[19] K. Papadamou *et al.*, "Disturbed YouTube for Kids: Characterizing and Detecting Inappropriate Videos Targeting Young Children," *Proceedings of the International AAAI Conference on Web and Social Media*, vol. 14, pp. 522–533, May 2020, doi: 10.1609/icwsm.v14i1.7320.

[20] D. Khurana, A. Koli, K. Khatter, and S. Singh, "Natural language processing: state of the art, current trends and challenges," *Multimed. Tools Appl.*, vol. 82, no. 3, pp. 3713–3744, Jan. 2023, doi: 10.1007/s11042-022-13428-4.

[21] K. Kowsari, K. J. Meimandi, M. Heidarysafa, S. Mendu, L. Barnes, and D. Brown, "Text classification algorithms: A survey," 2019, *MDPI AG*. doi: 10.3390/info10040150.

[22] S. Hochreiter and J. Schmidhuber, "Long Short-Term Memory," *Neural Comput.*, vol. 9, no. 8, pp. 1735–1780, Nov. 1997, doi: 10.1162/neco.1997.9.8.1735.

UNIVERSITAS
GADJAH MADA
Studi Komparatif Arsitektur Deep Learning Berbasis BiLSTM untuk Klasifikasi Konten YouTube Tidak Pantas bagi Anak-Anak dan Implementasinya pada Sistem Berbasis Web
Saidil Halim, Divi Galih Prasetyo Putri, S.Kom., M.Kom., Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[23] M. Schuster and K. K. Paliwal, "Bidirectional recurrent neural networks," *IEEE Transactions on Signal Processing*, vol. 45, no. 11, pp. 2673–2681, 1997, doi: 10.1109/78.650093.

[24] A. Graves and J. Schmidhuber, "Framewise phoneme classification with bidirectional LSTM and other neural network architectures," in *Neural Networks*, Jul. 2005, pp. 602–610. doi: 10.1016/j.neunet.2005.06.042.

[25] A. T. Mohan and D. V. Gaitonde, "A Deep Learning based Approach to Reduced Order Modeling for Turbulent Flow Control using LSTM Neural Networks," Apr. 2018, [Online]. Available: http://arxiv.org/abs/1804.09269

[26] D. Bahdanau, K. Cho, and Y. Bengio, "Neural Machine Translation by Jointly Learning to Align and Translate," May 2016, [Online]. Available: http://arxiv.org/abs/1409.0473

[27] M. Shirdel, M. Di Mauro, and A. Liotta, "A framework for binary classification evaluation metrics," *Inf. Sci. (N. Y).*, vol. 749, p. 123540, Sep. 2026, doi: 10.1016/j.ins.2026.123540.

[28] James. Rumbaugh, Ivar. Jacobson, and Grady. Booch, *The unified modeling language reference manual*. Addison-Wesley Longman, 2000.

[29] M. Sokolova and G. Lapalme, "A systematic analysis of performance measures for classification tasks," *Inf. Process. Manag.*, vol. 45, no. 4, pp. 427–437, Jul. 2009, doi: 10.1016/j.ipm.2009.03.002.

[30] Vercel, "Next.js Documentation." Accessed: Jun. 13, 2026. [Online]. Available: https://nextjs.org/docs

[31] tiangolo, "Fast API Documentation." Accessed: Jul. 05, 2026. [Online]. Available: https://fastapi.tiangolo.com/

[32] Google, "YouTube Data API v3 Documentation." Accessed: Jun. 13, 2026. [Online]. Available: https://developers.google.com/youtube/v3/docs?hl=id

UNIVERSITAS
GADJAH MADA
Studi Komparatif Arsitektur Deep Learning Berbasis BiLSTM untuk Klasifikasi Konten YouTube Tidak Pantas bagi Anak-Anak dan Implementasinya pada Sistem Berbasis Web
Saidil Halim, Divi Galih Prasetyo Putri, S.Kom., M.Kom., Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[33] P. Chapman, "CRISP-DM 1.0: Step-by-step data mining guide," 2000. [Online]. Available: https://api.semanticscholar.org/CorpusID:59777418

[34] A. Gemino and D. Parker, "Use Case Diagrams in Support of Use Case Modeling: Deriving Understanding from the Picture." [Online]. Available: http://www.igi-global.com

[35] J. S. Milutinović, P. O. Milić, and S. S. Vučetić, "Wireframe Modelling of Web Based Open Data Applications," *Scientific Publications of the State University of Novi Pazar Series A: Applied Mathematics, Informatics and mechanics*, vol. XVI, no. 2, pp. 111–123, 2024, doi: 10.46793/SPSUNP2402.111M.

[36] R. Poston, K. Sajja, and A. Calvert, "LNCS 8527 - Managing User Acceptance Testing of Business Applications," 2014.

[37] W. Chen, Y. Su, Y. Shen, Z. Chen, X. Yan, and W. Wang, "How Large a Vocabulary Does Text Classification Need? A Variational Approach to Vocabulary Selection." [Online]. Available: https://github.com/wenhuchen/

[38] X. and X. Y. and H. X. Sun Chi and Qiu, "How to Fine-Tune BERT for Text Classification?," in *Chinese Computational Linguistics*, X. and J. H. and L. Z. and L. Y. Sun Maosong and Huang, Ed., Cham: Springer International Publishing, 2019, pp. 194–206.

[39] E. Garcia, J. Gomes, A. B. Júnior, C. Borges, and N. da Silva, "DeepLearningBrasil@LT-EDI-2023: Exploring Deep Learning Techniques for Detecting Depression in Social Media Text," Nov. 2023, doi: 10.26615/978-954-452-084-7_042.

[40] L. N. Smith, "Cyclical Learning Rates for Training Neural Networks," in *2017 IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2017, pp. 464–472. doi: 10.1109/WACV.2017.58.

[41] S. Dhawan, K. Singh, and M. Yadav, "Hybrid Deep Learning Recommendation System for Accurate Movie and Product Review

UNIVERSITAS
GADJAH MADA
Studi Komparatif Arsitektur Deep Learning Berbasis BiLSTM untuk Klasifikasi Konten YouTube Tidak Pantas bagi Anak-Anak dan Implementasinya pada Sistem Berbasis Web
Saidil Halim, Divi Galih Prasetyo Putri, S.Kom., M.Kom., Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Predictions," *Scalable Computing: Practice and Experience*, vol. 26, no. 4, Jun. 2025, doi: 10.12694/scpe.v26i4.4449.

[42] "Embedding layer." Accessed: Jul. 21, 2026. [Online]. Available: https://keras.io/api/layers/core_layers/embedding/

[43] Y. Bengio, R. Ducharme, P. Vincent, and C. Janvin, "A neural probabilistic language model," *J. Mach. Learn. Res.*, vol. 3, no. null, pp. 1137–1155, Mar. 2003.

[44] N. Anjum, M. M. Hasan, N. Jahan, S. I. Ahamed, A. Garefino, and N. Sakib, "Early Digital Engagement Among Younger Children and the Transformation of Parenting in the Digital Age From an mHealth Perspective: Scoping Review," *JMIR Pediatr. Parent.*, vol. 8, 2025, doi: 10.2196/60355.

[45] J. R. Landis and G. G. Koch, "The Measurement of Observer Agreement for Categorical Data," *Biometrics*, vol. 33, no. 1, p. 159, Mar. 1977, doi: 10.2307/2529310.

[46] S. Farhadpour, T. A. Warner, and A. E. Maxwell, "Selecting and Interpreting Multiclass Loss and Accuracy Assessment Metrics for Classifications with Class Imbalance: Guidance and Best Practices," *Remote Sens. (Basel).*, vol. 16, no. 3, Feb. 2024, doi: 10.3390/rs16030533.

[47] H. Feng, Z. Lin, and Q. Ma, "Perturbation-Based Self-Supervised Attention for Attention Bias in Text Classification," *IEEE/ACM Trans. Audio Speech Lang. Process.*, vol. 31, pp. 3139–3151, 2023, doi: 10.1109/TASLP.2023.3302230.

[48] Y. Xiong, G. Chen, and J. Cao, "Research on Public Service Request Text Classification Based on BERT-BiLSTM-CNN Feature Fusion," *Applied Sciences (Switzerland)*, vol. 14, no. 14, Jul. 2024, doi: 10.3390/app14146282.