UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

# DAFTAR PUSTAKA

[1] Pusat Kajian Anggaran Badan Keahlian DPR RI, *Analisis RKP dan Pembicaraan Pendahuluan APBN*. Indonesia, 2021.

[2] WHO, "Maternal Mortality Levels and Trends," Apr. 18, 2017. https://mmr2017.srhr.org/ (accessed Apr. 20, 2022).

[3] DetikHealth, "'4 Terlalu' dan '3 Terlambat' Sumbang Angka Kematian Ibu," 2010. https://health.detik.com/berita-detikhealth/d-1354699/4-terlalu-dan-3-terlambat-sumbang-angka-kematian-ibu (accessed Apr. 19, 2022).

[4] R. Erlina, T. A. Larasati, and B. Kurniawan, "FAKTOR-FAKTOR YANG MEMPENGARUHI IBU HAMIL TERHADAP KUNJUNGAN PEMERIKSAAN KEHAMILAN DI PUSKESMAS RAWAT INAP PANJANG BANDAR LAMPUNG," | *Medical Journal of Lampung University*, vol. 2, 2013.

[5] D. E. Saraswati, S. St, M. Kes, F. Putri Hariastuti, and E. Kartu Skor Poedji Rochjati, "UNTUK DETEKSI RESIKO TINGGI PADA IBU HAMIL DI PUSKESMAS NGUMPAKDALEM KABUPATEN BOJONEGORO," KSPR, 2017.

[6] N. Surya Fitri Yanti, R. herawati, and Andriana, "GAMBARAN PENGGUNAAN KARTU SKOR POEDJI ROCHJATI DALAM DETEKSI DINI RISIKO TINGGI KEHAMILAN," *Maternity And Neonatal: Jurnal Kebidanan*, vol. 10, no. 1, 2022, [Online]. Available: https://journal.upp.ac.id/index.php/jmn

[7] A. Akbulut, E. Ertugrul, and V. Topcu, "Fetal health status prediction based

UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

on maternal clinical history using machine learning techniques," *Computer Methods and Programs in Biomedicine*, vol. 163, pp. 87–100, Sep. 2018, doi: 10.1016/j.cmpb.2018.06.010.

[8] M. W. L. Moreira, J. J. P. C. Rodrigues, G. A. B. Marcondes, A. J. V. Neto, and N. D. I. de la T. Kumar, "A Preterm Birth Risk Prediction System for Mobile Health Applications Basedon the Support Vector Machine Algorithm," May 2018.

[9] N. O. Idris, "KLASIFIKASI KONTEN RADIKALISME DI TWITTER DENGAN MODEL DEEP LEARNING MENGGUNAKAN LONG SHORT TERM MEMORY," Universitas Gadjah Mada, Yogyakarta, 2020.

[10] R. Jozefowicz and W. Zaremba, "An Empirical Exploration of Recurrent Network Architectures," 2015.

[11] N. Sakinah, M. Tahir, T. Badriyah, and iwan Syarif, "LSTM With Adam Optimization-Powered High Accuracy Preeclampsia Classification," Sep. 2019.

[12] G. Douzas, F. Bacao, J. Fonseca, and M. Khudinyan, "Imbalanced learning in land cover classification: Improving minority classes' prediction accuracy using the geometric SMOTE algorithm," *Remote Sensing*, vol. 11, no. 24, Dec. 2019, doi: 10.3390/rs11243040.

[13] G. M. Weiss, "The Effect of Class Distribution on Classifier Learning: An Empirical Study," 2001.

[14] S. Mishra, "Handling Imbalanced Data: SMOTE vs. Random Undersampling," *International Research Journal of Engineering and Technology*, 2017, [Online]. Available: www.irjet.net

UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

[15] T. E. Tallo, "MODIFIKASI METODE SYNTHETIC MINORITY OVERSAMPLING TECHNIQUE (SMOTE) MENGGUNAKAN ALGORITMA GENETIKA UNTUK MENANGANI MASALAH IMBALANCED DATASET," Universitas Gadjah Mada, Yogyakarta, 2018. [Online]. Available: http://etd.repository.ugm.ac.id/

[16] N. Reimers and I. Gurevych, "Optimal Hyperparameters for Deep LSTM-Networks for Sequence Labeling Tasks," Jul. 2017, [Online]. Available: http://arxiv.org/abs/1707.06799

[17] adella Gravita, "Kenali Hyperparameter Tuning dalam Machine Learning." https://codingstudio.id/hyperparameter-tuning/ (accessed Jul. 04, 2022).

[18] B. Zahran Aufa, S. Suyanto, and A. Arifianto, "Hyperparameter Setting of LSTM-based Language Model using Grey Wolf Optimizer," 2020.

[19] R. Knowles *et al.*, "High Risk Pregnancy Prediction from Clinical Text."

[20] S. Wanriko, N. Hnoohom, K. Wongpatikaseree, A. Jitpattanakul, and O. Musigavong, "Risk Assessment of Pregnancy-induced Hypertension Using a Machine Learning Approach," in *2021 Joint 6th International Conference on Digital Arts, Media and Technology with 4th ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunication Engineering, ECTI DAMT and NCON 2021*, Mar. 2021, pp. 233–237. doi: 10.1109/ECTIDAMTNCON51128.2021.9425764.

[21] Y. Zhang, S. Lu, Y. Wu, W. Hu, and Z. Yuan, "Prediction of Preterm Using Time Series Technology Based Machine Learning: Retrospective Cohort Study (Preprint)," *JMIR Medical Informatics*, Jun. 2022, doi: 10.2196/33835.

UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

[22] X. Lu, J. Wang, J. Cai, Z. Xing, and J. Huang, "PREDICTION OF GESTATIONAL DIABETES AND HYPERTENSION BASED ON PREGNANCY EXAMINATION DATA," *Journal of Mechanics in Medicine and Biology*, vol. 22, no. 3, Apr. 2022, doi: 10.1142/S0219519422400012.

[23] Kementerian Kesehatan RI, "Profil kesehatan Indonesia Tahun 2013 ," *http://www. kemkes.go.id*, Jun. 06, 2022.

[24] W. Nuraisya, "Deteksi Risiko Tinggi Kehamilan Pada Pelayanan ANCTerpadu di Puskesmas Bendo Kabupaten Kediri," *Jurnal Kesehatan Andalas*, 2018.

[25] D. Iryani, "FAKTOR YANG MEMPENGARUHI CAKUPAN PEMERIKSAAN K1 DAN K4 KEHAMILAN," *Nursing Arts*, vol. 14, 2020.

[26] A. Alimul Hidayat, *Metode penelitian kebidanan teknik analisis data*. Jakarta: Salemba Medika, 2007.

[27] I. el Naqa and M. J. Murphy, "What Is Machine Learning?," in *Machine Learning in Radiation Oncology*, Springer International Publishing, 2015, pp. 3–11. doi: 10.1007/978-3-319-18305-3_1.

[28] IBM Cloud Education, "Machine Learning," Jul. 15, 2020. https://www.ibm.com/cloud/learn/machine-learning (accessed Jun. 05, 2022).

[29] T. Mitchell, *Machine Learning*. Mcgraw-Hill Science/Engineering/Math, 1997.

[30] R. O. Duda, P. E. Hart, and D. G. Stork, *Pattern Classification, Second Edition*. Wiley-Interscience, 2000. [Online]. Available: http://www.amazon.co.uk/Pattern-Classification-Second-Edition-Wiley-

UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

Interscience/dp/0471056693/ref=sr_1_1?ie=UTF8&qid=1393323898&sr=8-1&keywords=Pattern+Classification

[31] A. Santosa, Budi and Umam, *Data Mining dan Big Data Analytics: Teori dan Implementasi Menggunakan Python & Apache Spark*. Penebar Media Pustaka, 2018.

[32] L. Deng and D. Yu, "Deep learning: Methods and applications," *Foundations and Trends in Signal Processing*, vol. 7, no. 3–4. Now Publishers Inc, pp. 197–387, 2013. doi: 10.1561/2000000039.

[33] I. Goodfellow, Y. Bengio, and A. Courville, *Deep Learning*. MIT Press, 2016.

[34] IBM Cloud Education, "Deep learning," May 01, 2020. https://www.ibm.com/cloud/learn/deep-learning#toc-what-is-de-6i8FHi1_ (accessed Jun. 05, 2022).

[35] IBM Cloud Education, "RNN," Sep. 14, 2020. https://www.ibm.com/cloud/learn/recurrent-neural-networks (accessed Jun. 08, 2022).

[36] S. Hochreiter and J. Schmidhuber, "Long Short-Term Memory," 1997.

[37] Z. Zhao, W. Chen, X. Wu, P. C. Y. Chen, and J. Liu, "LSTM network: A deep learning approach for Short-term traffic forecast," *IET Intelligent Transport Systems*, vol. 11, no. 2, pp. 68–75, Mar. 2017, doi: 10.1049/iet-its.2016.0208.

[38] Colah, "Understanding LSTM Networks." http://colah.github.io/posts/2015-08-Understanding-LSTMs/ (accessed Jun. 17, 2022).

[39] A. Khumaidi, R. Raafi, I. Permana Solihin, and J. Rs Fatmawati, "Pengujian Algoritma Long Short Term Memory untuk Prediksi Kualitas Udara dan

UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

Suhu Kota Bandung," *Jurnal Telematika*, vol. 15, no. 1.

[40] M. Ardian R.A, "PERAMALAN JUMLAH POSITIFHARIAN PASIEN COVID-19 DENGAN MENGGUNAKAN MULTIVARIABLEDAN HYBRIDARIMA-LSTM," 2022.

[41] N. v Chawla, K. W. Bowyer, L. O. Hall, and W. P. Kegelmeyer, "SMOTE: Synthetic Minority Over-sampling Technique," 2002.

[42] S. Sofyan and A. Prasetyo, "Penerapan Synthetic Minority Oversampling Technique (SMOTE) Terhadap Data Tidak Seimbang Pada Tingkat Pendapatan Pekerja Informal Di Provinsi D.I. Yogyakarta Tahun 2019," 2021.

[43] P. Milakhul Khasanah, "Classification Of Mental Retardation Patients In Menur mental Hospital East Java Province Using Synthetic Minority Oversampling Technique (SMOTE)- Classification and Regression Trees (CART)," Institut Teknologi Sepuluh Nopember, Surabaya, 2015.

[44] A. Patel and A. Buckgit, "Penyetelan hyperparameter model (v2)," 2022. https://docs.microsoft.com/id-id/azure/machine-learning/how-to-tune-hyperparameters (accessed Jul. 05, 2022).

[45] J. Brownlee, "How to Choose an Activation Function for Deep Learning," 2021. https://machinelearningmastery.com/choose-an-activation-function-for-deep-learning/#:~:text=An%20activation%20function%20in%20a,a%20layer%20of%20the%20network. (accessed Jul. 06, 2022).

[46] H. Abbasimehr, M. Shabani, and M. Yousefi, "An optimized model using LSTM network for demand forecasting," *Computers and Industrial*

UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

*Engineering*, vol. 143, May 2020, doi: 10.1016/j.cie.2020.106435.

[47] P. M. Radiuk, "Impact of Training Set Batch Size on the Performance of Convolutional Neural Networks for Diverse Datasets," *Information Technology and Management Science*, vol. 20, no. 1, Jan. 2018, doi: 10.1515/itms-2017-0003.

[48] I. Kandel and M. Castelli, "The effect of batch size on the generalizability of the convolutional neural networks on a histopathology dataset," *ICT Express*, vol. 6, no. 4, pp. 312–315, Dec. 2020, doi: 10.1016/j.icte.2020.04.010.

[49] T. NURHIKMAT, "Implementasi Deep Learning Untuk Image Classification Menggunakan Algoritma Convolutional Neural Network (CNN) pada Citra Wayang Golek," Universitas Islam Indonesia, Yogyakarta, 2018.

[50] M. Makhtar, D. C. Neagu, and M. J. Ridley, "Information Technology in Bio- and Medical Informatics," in *Binary Classification Models Comparison: On the Similarity of Datasets and Confusion Matrix for Predictive Toxicology Applications*, 2011, vol. 6865, pp. 108–122. doi: 10.1007/978-3-642-23208-4.

[51] I. H. Witten and E. Frank, *Data Mining Practical Machine Learning Tools and Techniques*, 2nd ed. San Francisco: Morgan Kaufmann Publishers, 2015.

[52] J. H. Miao and K. H. Miao, "Cardiotocographic Diagnosis of Fetal Health based on Multiclass Morphologic Pattern Predictions using Deep Learning Classification," 2018. [Online]. Available: www.ijacsa.thesai.org

[53] M. Farid Naufal and S. Ferdiana Kusuma, "PENDETEKSI CITRA MASKER WAJAH MENGGUNAKAN CNN DAN TRANSFER LEARNING," vol. 8, no. 6, pp. 1293–1300, 2021, doi:

UNIVERSITAS
GADJAH MADA
**PENDETEKSIAN JENIS RISIKO KEHAMILAN PADA IBU HAMIL MENGGUNAKAN ALGORITMA LSTM**
GALIH MALELA D, Adhistya Erna Permanasari, S.T., M.T., Ph.D.;Dr. Indriana Hidayah, S.T., M.T.
**Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/**

10.25126/jtiik.202185201.

[54] K. Hu *et al.*, "Retinal vessel segmentation of color fundus images using multiscale convolutional neural network with an improved cross-entropy loss function," *Neurocomputing*, vol. 309, pp. 179–191, Oct. 2018, doi: 10.1016/j.neucom.2018.05.011.

[55] R. Knowles, M. Dredze, K. Evans, E. Lasser, and T. Richards, "High Risk Pregnancy Prediction from Clinical Text," *Proceeding of the NIPS workshop on machine learning for clnical data analysis*, pp. 1–4, 2014.