UNIVERSITAS
GADJAH MADA
Model Klasifikasi Data Kriminal Menggunakan Random Forest dan SMOTE
Muhammad Ridwan Wibowo, Aina Musdholifah, S.Kom., M.Kom. Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Almamlook, R. E., Kwayu, K. M., Alkasisbeh, M. R., & Frefer, A. A. (2019). Comparison of machine learning algorithms for predicting traffic accident severity. *2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology, JEEIT 2019 - Proceedings*, 272–276. https://doi.org/10.1109/JEEIT.2019.8717393

Assi, K. (2020). Traffic crash severity prediction—a synergy by hybrid principal component analysis and machine learning models. *International Journal of Environmental Research and Public Health*, *17*(20), 1–16. https://doi.org/10.3390/ijerph17207598

Astarita, V., Giofrè, V. P., Guido, G., & Vitale, A. (2019). A single intersection cooperative-competitive paradigm in real time traffic signal settings based on floating car data. *Energies*, *12*(3). https://doi.org/10.3390/en12030409

Belgiu, M., & Drăgu, L. (2016). Random forest in remote sensing: A review of applications and future directions. In *ISPRS Journal of Photogrammetry and Remote Sensing* (Vol. 114, pp. 24–31). Elsevier B.V. https://doi.org/10.1016/j.isprsjprs.2016.01.011

Breiman, L. (2001). *Random Forests* (Vol. 45).

Chawla, N. V, Bowyer, K. W., Hall, L. O., & Kegelmeyer, W. P. (2002). SMOTE: Synthetic Minority Over-sampling Technique. In *Journal of Artificial Intelligence Research* (Vol. 16).

Chen, M. M., & Chen, M. C. (2020). Modeling road accident severity with comparisons of logistic regression, decision tree and random forest. *Information (Switzerland)*, *11*(5). https://doi.org/10.3390/INFO11050270

Fiorentini, N., & Losa, M. (2020). Handling Imbalanced Data in Road Crash Severity Prediction by Machine Learning Algorithms. *Infrastructures*, *5*(7). https://doi.org/10.3390/infrastructures5070061

Flach, P. (2012). *MACHINE LEARNING The Art and Science of Algorithms that Make Sense of Data*.

UNIVERSITAS
GADJAH MADA
Model Klasifikasi Data Kriminal Menggunakan Random Forest dan SMOTE
Muhammad Ridwan Wibowo, Aina Musdholifah, S.Kom., M.Kom. Ph.D
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Freund, Y., & Schapire, R. E. (1996). *Experiments with a New Boosting Algorithm*. http://www.research.att.com/

Hair Jr, J. F., Black, Wi. C., Babin, B. J., & Anderson, R. E. (2006). *Multivariate Data Analysis*.

James, Gareth., Witten, Daniela., Hastie, Trevor., & Tibshirani, Robert. (2017). *An introduction to statistical learning : with applications in R*. Springer : Springer Science+Business Media.

Kodepogu, K., Manjeti, V. B., & Siriki, A. B. (2023a). Machine Learning for Road Accident Severity Prediction. *Mechatronics and Intelligent Transportation Systems*, *2*(4). https://doi.org/10.56578/mits020403

Malik, S., El Sayed, H., Khan, M. A., & Khan, M. J. (2021). Road Accident Severity Prediction - A Comparative Analysis of Machine Learning Algorithms. *2021 IEEE Global Conference on Artificial Intelligence and Internet of Things, GCAIoT 2021*, 69–74. https://doi.org/10.1109/GCAIoT53516.2021.9693055

Mohammadpour, S. I., Khedmati, M., & Zada, M. J. H. (2023). Classification of truck-involved crash severity: Dealing with missing, imbalanced, and high dimensional safety data. *PLoS ONE*, *18*(3 March). https://doi.org/10.1371/journal.pone.0281901

Morris, C., & Yang, J. J. (2021). Effectiveness of resampling methods in coping with imbalanced crash data: Crash type analysis and predictive modeling. *Accident Analysis and Prevention*, *159*. https://doi.org/10.1016/j.aap.2021.106240

Sanjurjo-de-No, A., Pérez-Zuriaga, A. M., & García, A. (2023). Analysis and prediction of injury severity in single micromobility crashes with Random Forest. *Heliyon*, *9*(12). https://doi.org/10.1016/j.heliyon.2023.e23062

WHO. (2023). *Global status report on road safety 2023*.

Yan, M., & Shen, Y. (2022). Traffic Accident Severity Prediction Based on Random Forest. *Sustainability (Switzerland)*, *14*(3). https://doi.org/10.3390/su14031729