**REFERENCES**

[1] Y. Abakarim, M. Lahby, and A. Attioui, ``An ef\_cient real time model

for credit card fraud detection based on deep learning,'' in *Proc. 12th*

*Int. Conf. Intell. Systems: Theories Appl.*, Oct. 2018, pp. 1\_7, doi:

10.1145/3289402.3289530.

[2] H. Abdi and L. J. Williams, ``Principal component analysis,'' *Wiley Inter-*

*discipl. Rev., Comput. Statist.*, vol. 2, no. 4, pp. 433\_459, Jul. 2010, doi:

10.1002/wics.101.

[3] V. Arora, R. S. Leekha, K. Lee, and A. Kataria, ``Facilitating user

authorization from imbalanced data logs of credit cards using arti\_cial

intelligence,'' *Mobile Inf. Syst.*, vol. 2020, pp. 1\_13, Oct. 2020, doi:

10.1155/2020/8885269.

[4] A. O. Balogun, S. Basri, S. J. Abdulkadir, and A. S. Hashim, ``Performance

analysis of feature selection methods in software defect prediction: A

search method approach,'' *Appl. Sci.*, vol. 9, no. 13, p. 2764, Jul. 2019,

doi: 10.3390/app9132764.

[5] B. Bandaranayake, ``Fraud and corruption control at education system

level: A case study of the Victorian department of education and early

childhood development in Australia,'' *J. Cases Educ. Leadership*, vol. 17,

no. 4, pp. 34\_53, Dec. 2014, doi: 10.1177/1555458914549669.

[6] J. Bªaszczy«ski, A. T. de Almeida Filho, A. Matuszyk, M. Szelg\_, and

R. Sªowi«ski, ``Auto loan fraud detection using dominance-based rough set

approach versus machine learning methods,'' *Expert Syst. Appl.*, vol. 163,

Jan. 2021, Art. no. 113740, doi: 10.1016/j.eswa.2020.113740.

[7] B. Branco, P. Abreu, A. S. Gomes, M. S. C. Almeida, J. T. Ascensão,

and P. Bizarro, ``Interleaved sequence RNNs for fraud detection,'' in *Proc.*

*26th ACM SIGKDD Int. Conf. Knowl. Discovery Data Mining*, 2020,

pp. 3101\_3109, doi: 10.1145/3394486.3403361.

[8] F. Cartella, O. Anunciacao, Y. Funabiki, D. Yamaguchi, T. Akishita, and

O. Elshocht, ``Adversarial attacks for tabular data: Application to fraud

detection and imbalanced data,'' 2021, *arXiv:2101.08030*.

[9] S. S. Lad, I. Dept. of CSERajarambapu Institute of TechnologyRajaramnagarSangliMaharashtra,

and A. C. Adamuthe, ``Malware classi

\_cation with improved convolutional neural network model,'' *Int.*

*J. Comput. Netw. Inf. Secur.*, vol. 12, no. 6, pp. 30\_43, Dec. 2021,

doi: 10.5815/ijcnis.2020.06.03.

[10] V. N. Dornadula and S. Geetha, ``Credit card fraud detection using machine

learning algorithms,'' *Proc. Comput. Sci.*, vol. 165, pp. 631\_641, Jan. 2019,

doi: 10.1016/j.procs.2020.01.057.

[11] I. Benchaji, S. Douzi, and B. E. Ouahidi, ``Credit card fraud detection

model based on LSTM recurrent neural networks,'' *J. Adv. Inf. Technol.*,

vol. 12, no. 2, pp. 113\_118, 2021, doi: 10.12720/jait.12.2.113-118.

[12] Y. Fang, Y. Zhang, and C. Huang, ``Credit card fraud detection based on

machine learning,'' *Comput., Mater. Continua*, vol. 61, no. 1, pp. 185\_195,

2019, doi: 10.32604/cmc.2019.06144.

[13] J. Forough and S. Momtazi, ``Ensemble of deep sequential models for

credit card fraud detection,'' *Appl. Soft Comput.*, vol. 99, Feb. 2021,

Art. no. 106883, doi: 10.1016/j.asoc.2020.106883.

[14] K. He, X. Zhang, S. Ren, and J. Sun, ``Deep residual learning for image

recognition,'' 2015, *arXiv:1512.03385*.

[15] X. Hu, H. Chen, and R. Zhang, ``Short paper: Credit card fraud detection

using LightGBM with asymmetric error control,'' in *Proc. 2nd*

*Int. Conf. Artif. Intell. for Industries (AII)*, Sep. 2019, pp. 91\_94, doi:

10.1109/AI4I46381.2019.00030.

[16] J. Kim, H.-J. Kim, and H. Kim, ``Fraud detection for job placement

using hierarchical clusters-based deep neural networks,'' *Int.*

*J. Speech Technol.*, vol. 49, no. 8, pp. 2842\_2861, Aug. 2019,

doi: 10.1007/s10489-019-01419-2.

[17] M.-J. Kim and T.-S. Kim, ``A neural classi\_er with fraud density map for

effective credit card fraud detection,'' in *Intelligent Data Engineering and*

*Automated Learning*, vol. 2412, H. Yin, N. Allinson, R. Freeman, J. Keane,

and S. Hubbard, Eds. Berlin, Germany: Springer, 2002, pp. 378\_383, doi:

10.1007/3-540-45675-9\_56.

[18] N. Kousika, G. Vishali, S. Sunandhana, and M. A. Vijay,

``Machine learning based fraud analysis and detection system,''

*J. Phys., Conf.*, vol. 1916, no. 1, May 2021, Art. no. 012115,

doi: 10.1088/1742-6596/1916/1/012115.

[19] R. F. Lima and A. Pereira, ``Feature selection approaches to fraud detection

in e-payment systems,'' in *E-Commerce and Web Technologies*, vol. 278,

D. Bridge and H. Stuckenschmidt, Eds. Springer, 2017, pp. 111\_126, doi:

10.1007/978-3-319-53676-7\_9.

[20] Y. Lucas and J. Jurgovsky, ``Credit card fraud detection using machine

learning: A survey,'' 2020, *arXiv:2010.06479*.

[21] H. Zhou, H.-F. Chai, and M.-L. Qiu, ``Fraud detection within bankcard

enrollment on mobile device based payment using machine learning,''

*Frontiers Inf. Technol. Electron. Eng.*, vol. 19, no. 12, pp. 1537\_1545,

Dec. 2018, doi: 10.1631/FITEE.1800580.

[22] S. Makki, Z. Assaghir,Y. Taher, R. Haque, M.-S. Hacid, and H. Zeineddine,

``An experimental study with imbalanced classi\_cation approaches for

credit card fraud detection,'' *IEEE Access*, vol. 7, pp. 93010\_93022, 2019,

doi: 10.1109/ACCESS.2019.2927266.

[23] I. Matloob, S. A. Khan, and H. U. Rahman, ``Sequence mining and

prediction-based healthcare fraud detection methodology,'' *IEEE Access*,

vol. 8, pp. 143256\_143273, 2020, doi: 10.1109/ACCESS.2020.3013962.

[24] I. Mekterovi¢, M. Karan, D. Pintar, and L. Brki¢, ``Credit card fraud

detection in card-not-present transactions: Where to invest?'' *Appl. Sci.*,

vol. 11, no. 15, p. 6766, Jul. 2021, doi: 10.3390/app11156766.

[25] D. Molina, A. LaTorre, and F. Herrera, ``SHADE with iterative local search

for large-scale global optimization,'' in *Proc. IEEE Congr. Evol. Comput.*

*(CEC)*, Jul. 2018, pp. 1\_8, doi: 10.1109/CEC.2018.8477755.