

Literatura

- [1] EDGEIMPULSE. *What is edge machine learning (edge ML)?* 2023. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/what-is-edge-machine-learning>, přístup: 2025-01-19
- [2] RedHat. *What is Edge Machine Learning?* 2023. Dostupné z: <https://www.redhat.com/en/topics/edge-computing/what-is-edge-machine-learning>, přístup: 2025-01-19
- [3] Microsoft. *What is edge architecture?* 2023. Dostupné z: <https://azure.microsoft.com/cs-cz/resources/cloud-computing-dictionary/what-is-edge-computing>, přístup: 12-03-2025 (microsoftEdgeArchitektura)
- [4] IBM. *What is edge AI?* 2025. Dostupné z: <https://www.ibm.com/think/topics/edge-ai>, přístup: 12-03-2025
- [5] EDGEIMPULSE. *What is edge computing?* 2023. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/edge-ai-fundamentals/what-is-edge-computing>, přístup: 2025-01-19 (EdgeImpulse202301)
- [6] EDGEIMPULSE. *What is edge machine learning?* 2023. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/what-is-edge-machine-learning>, přístup: 2025-01-19
- [7] Run.AI. *Edge AI Guide* 2023. Dostupné z: <https://www.run.ai/guides/machine-learning-operations/edge-ai>, přístup: 2025-01-19
- [8] Zhang, Jiale and Chen, Bing and Zhao, Yanchao and Cheng, Xiang and Hu, Feng. *Data Security and Privacy-Preserving in Edge Computing Paradigm: Survey and Open Issues* 2018. Dostupné z: <http://dx.doi.org/10.1109/ACCESS.2018.2820162>
- [9] Kadhum, Methaq and Manaseer, Saher and Latif, Abdel. *Cloud-Edge Network Data Processing based on User Requirements using Modify MapReduce Algorithm and Machine Learning Techniques* 2019. Dostupné z: <http://dx.doi.org/10.14569/IJACSA.2019.0101242>
- [10] Arm. *Cloud AI, Edge AI, Endpoint AI. What's the Difference?* 2023. Dostupné z: <https://newsroom.arm.com/blog/cloud-edge-endpoint-ai>, přístup: 2025-01-19 (Arm)
- [11] Amazon. *What is cloud computing?* 2025. Dostupné z: <https://aws.amazon.com/what-is-cloud-computing>, přístup: 2025-01-19

- [12] Erricsson. *Edge computing* 2025.
Dostupné z: <https://www.ericsson.com/en/edge-computing>,
přístup: 2025-01-19
- [13] Klonoff, David C. *Fog Computing and Edge Computing Architectures for Processing Data From Diabetes Devices Connected to the Medical Internet of Things* 2017.
Dostupné z: <http://dx.doi.org/10.1177/1932296817717007>
- [14] Tech In. *Far Edge vs. Near Edge in Edge Computing* 2019.
Dostupné z: <https://tech.ginkos.in/2019/06/far-edge-vs-near-edge-in-edge-computing.html>, přístup: 2025-01-19
- [15] Etsi. *Multi-access Edge Computing (MEC)* 2024.
Dostupné z: <https://www.etsi.org/technologies/multi-access-edge-computing>, přístup: 2025-01-19
- [16] Cisco. *What Is Edge Computing?* 2025.
Dostupné z: <https://www.cisco.com/site/us/en/learn/topics/computing/what-is-edge-computing.htm>, přístup: 2025-01-19
- [17] Cisco. *Fog computing along the Cloud-to-Thing continuum* 2025.
Dostupné z: <https://www.i-scoop.eu/internet-of-things-iot/fog-computing-cloud-internet-things>, přístup: 2025-01-19
- [18] LAWTON George. *Edge AI* n.d..
Dostupné z: <https://www.techtarget.com/searchenterpriseai/definition/edge-AI> (lawton2025techtarget)
- [19] F5. *What Is Edge AI? Navigating Artificial Intelligence at the Edge* 2025. Dostupné z: <https://www.f5.com/glossary/what-is-edge-ai>
- [20] Martino, Ron and Oshana, Robert and Ekambaram, Natraj and Osman, Ali and Pilati, Laurent. *Edge Computing Intelligence* n.d..
Dostupné z: <https://www.eetasia.com/edge-computing-intelligence/>
- [21] Edgeimpulse. *How to choose an edge AI device?* 2023.
Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/edge-ai-fundamentals/how-to-choose-an-edge-ai-device>, přístup: 2025-01-19
- [22] May, Alec. *Increasing Intelligence at the Edge With Embedded Processors* 2024. Dostupné z: <https://www.ti.com/lit/wp/spr349/spr349.pdf>
- [23] Shelby, Zach. *Utensor and tensor flow announcement* 2019.
Dostupné z: <https://os.mbed.com/blog/entry/uTensor-and-Tensor-Flow-Announcement/> (Shelby)
- [24] Warden, Pete. *Launching TensorFlow Lite for Microcontrollers « Pete Warden's blog* 2020. Dostupné z: <https://petewarden.com/2019/03/07/launching-tensorflow-lite-for-microcontrollers/>
- [25] EDGEIMPULSE. *How to choose an edge AI device* 2023.
Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/edge-ai-fundamentals/how-to-choose-an-edge-ai-device>, přístup: 2025-01-19
- [26] Hackster. *Espressif's New ESP32-S3 Adds AI Features for IoT Devices* 2023. Dostupné z: <https://www.hackster.io/news/espressif-s-new-esp32-s3-adds-ai-features-for-iot-devices-b42b902abdf5>, přístup: 2025-01-19
- [27] Maltezos, Evangelos and Petousakis, Konstantinos and Dadoukis, Aris and Karagiannidis, Lazaros and Ouzounoglou, Eleftherios and Krommyda, Maria and Hadjipavlis, George and Amditis, Angelos. *A Smart Building Fire and Gas Leakage Alert System with Edge Computing and NG112 Emergency Call Capabilities* 2022.
- [28] SAP. *What is machine learning?* 2025.
Dostupné z: <https://www.sap.com/uk/products/artificial-intelligence/what-is-machine-learning.html>, přístup: 2025-01-19
- [29] ML4devs. *Machine Learning vs Traditional Software Development* 2025. Dostupné z: <https://www.ml4devs.com/en/articles/machine-learning-vs-traditional-software-development/>, přístup: 2025-01-19
- [30] EDGEIMPULSE. *What is Machine Learning* 2023. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/edge-ai-fundamentals/what-is-machine-learning>, přístup: 2025-01-19
- [31] Ronald van Loon. *Machine Learning Explained: Understanding Supervised, Unsupervised, and Reinforcement Learning* 2018.
Dostupné z: <https://www.linkedin.com/pulse/machine-learning-explained-understanding-supervised-ronald-van-loon>
- [32] Khushi Choudhary. *What is Supervised Learning – The Foundation of Machine Learning* 2024.
Dostupné z: <https://www.linkedin.com/pulse/what-supervised-learning-foundation-machine-khushi-choudhary-0eaoc/>
- [33] Shubham Sayon. *Supervised And Unsupervised Machine Learning* 2020. Dostupné z: <https://blog.finxtex.com/supervised-and-unsupervised-machine-learning/>

- [34] Jacob Murel. *What is reinforcement learning?* 2022. Dostupné z: <https://www.ibm.com/think/topics/reinforcement-learning>
- [35] Khushi Choudhary. *The Different Types of Machine Learning* 2024. Dostupné z: <https://www.linkedin.com/pulse/different-types-machine-learning-khushi-choudhary-6ybvvc/>
- [36] AWS. *What is reinforcement learning?* 2024. Dostupné z: <https://aws.amazon.com/what-is/reinforcement-learning/>
- [37] EDGEIMPULSE. *What is edge AI?* 2024. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/edge-ai-fundamentals/what-is-edge-ai>
- [38] Anton Morgunov. *The Life Cycle of a Machine Learning Project: What Are the Stages?* 2023. Dostupné z: <https://neptune.ai/blog/life-cycle-of-a-machine-learning-project>
- [39] Geeks for geeks. *Machine Learning Lifecycle* 2025. Dostupné z: <https://www.geeksforgeeks.org/machine-learning-lifecycle/>
- [40] Edge impulse. *Edge AI lifecycle* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/edge-ai-fundamentals/edge-ai-lifecycle>
- [41] Sambasivan, Nithya and Kapania, Shivani and Highfill, Hannah and Akrong, Diana and Paritosh, Praveen and Aroyo, Lora M. „Everyone wants to do the model work, not the data work“: *Data Cascades in High-Stakes AI* 2021. Dostupné z: <http://dx.doi.org/10.1145/3411764.3445518>
- [42] Vijay Janapa Reddi. *Machine Learning Systems* 2025. Dostupné z: <https://mlsysbook.ai/>
- [43] Jun Shan. *Medallion Architecture: What, Why and How* 2024. Dostupné z: <https://medium.com/@junshan0/medallion-architecture-what-why-and-how-ce07421ef06f>
- [44] Vijay Janapa Reddi. *Machine Learning Systems* 2025. Dostupné z: <https://mlsysbook.ai/>
- [45] Inmon, W.H.. *Building the Data Warehouse* 2005. Dostupné z: <https://books.google.cz/books?id=QFKTmh5IFS4C>
- [46] Tableau. *Guide To Data Cleaning: Definition, Benefits, Components, And How To Clean Your Data* 2025. Dostupné z: <https://www.tableau.com/learn/articles/what-is-data-cleaning>
- [47] Geeks for geeks. *What is Exploratory Data Analysis?* 2025. Dostupné z: <https://www.geeksforgeeks.org/what-is-exploratory-data-analysis/>
- [48] Datacamp. *Feature Extraction in Machine Learning: A Complete Guide* 2025. Dostupné z: <https://www.datacamp.com/tutorial/feature-extraction-machine-learning>
- [49] TensorFlow. *What's new in TensorFlow* 2025. Dostupné z: <https://www.tensorflow.org/>
- [50] PyTorch. *PyTorch - Get started* 2025. Dostupné z: <https://pytorch.org/>
- [51] Edge impulse. *Edge Impulse - AI for Any Edge Device* 2025. Dostupné z: <https://www.edgeimpulse.com>
- [52] IBM. *What is AutoML?* 2025. Dostupné z: <https://www.ibm.com/think/topics/automl>
- [53] Eastgate Software. *Understanding Training, Validation, and Testing Data in ML* 2025. Dostupné z: <https://medium.com/@eastgate/understanding-training-validation-and-testing-data-in-ml-c297e53d6096>
- [54] Rahul Holla. *Optimizing Machine Learning Models for Production* 2024. Dostupné z: <https://medium.com/@rahulholla1/optimizing-machine-learning-models-for-production-7b8f2cd4314f>
- [55] Ajay Verma. *Model Compression and Optimization: Techniques to Enhance Performance and Reduce Size* 2024. Dostupné z: <https://medium.com/@ajayverma23/model-compression-and-optimization-techniques-to-enhance-performance-and-reduce-size-3d697fd40f80>
- [56] Abirami Vina. *What is Model Optimization? A Quick Guide* 2024. Dostupné z: <https://www.ultralytics.com/blog/what-is-model-optimization-a-quick-guide>
- [57] Alessandro Lambertia. *Deep Learning Model Optimization Methods* 2024. Dostupné z: <https://neptune.ai/blog/deep-learning-model-optimization-methods>
- [58] Shawn Hymel. *TinyML: Getting Started with TensorFlow Lite for Microcontrollers* 2020. Dostupné z: <https://www.digikey.com/en/maker/projects/tinyml-getting-started-with-tensorflow-lite-for-microcontrollers>
- [59] Giordana Francesca Brescia. *Optimizing AI for Microcontrollers* 2025. Dostupné z: <https://www.embedded.com/optimizing-ai-for-microcontrollers/>

- [60] Edge Impulse. *What is edge MLOps?* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/edge-ai-fundamentals/what-is-edge-mlops>
- [61] IBM. *Federated Learning architecture* 2024. Dostupné z: <https://dataplatform.cloud.ibm.com/docs/content/wsj/analyze-data/fl-arch.html>
- [62] Hymel, Shawn and Banbury, Colby and Situnayake, Daniel and Elium, Alex and Ward, Carl and Kelcey, Mat and Baaijens, Mathijs and Majchrzycki, Mateusz and Plunkett, Jenny and Tischler, David and Grande, Alessandro and Moreau, Louis and Maslov, Dmitry and Beavis, Artie and Jongboom, Jan and Janapa Reddi, Vijay. *Edge Impulse: An MLOps Platform for Tiny Machine Learning* 2023. Dostupné z: https://proceedings.mlsys.org/paper_files/paper/2023/file/49fe55f5e9574714dda575bfb2177662-Paper-mlsys2023.pdf
- [63] Arcala research lab. *Efficient ML Computing - Embedded AI Ops* 2025. Dostupné z: https://arcala-research-lab.github.io/Efficient_ML_Computing_Book/contents/ops/ops.html
- [64] Scott Arbeit. *Streamlining your MLOps pipeline with GitHub Actions and Arm64 runners* 2024. Dostupné z: <https://github.blog/enterprise-software/ci-cd/streamlining-your-mlops-pipeline-with-github-actions-and-arm64-runners>
- [65] Lihang, Ying. *Edge MLOps: Architecture, Challenges, and Platform* 2024. Dostupné z: <https://sima.ai/blog/edge-mlops-architecture-challenges-and-platform/>
- [66] Stephen Oladele. *MLOps Landscape in 2025: Top Tools and Platforms* 2025. Dostupné z: <https://neptune.ai/blog/mlops-tools-platforms-landscape>
- [67] Daniel DeCapria. *Introduction to MLOps: Bridging Machine Learning and Operations* 2025. Dostupné z: <https://insights.sei.cmu.edu/blog/introduction-to-mlops-bridging-machine-learning-and-operations/>
- [68] Mucci, Tim and Stryker, Cole. *What is MLOps?* 2025. Dostupné z: <https://www.ibm.com/think/topics/mlops>
- [69] Nicolas Oman. *Concepts - Machine learning operations (MLOps) for AI and machine learning workflows* 2024. Dostupné z: <https://learn.microsoft.com/en-us/azure/aks/concepts-machine-learning-opss>
- [70] Shawn Hymel and Colby Banbury and Daniel Situnayake and Alex Elium and Carl Ward and Mat Kelcey and Mathijs Baaijens and Mateusz Majchrzycki and Jenny Plunkett and David Tischler and Alessandro Grande and Louis Moreau and Dmitry Maslov and Artie Beavis and Jan Jongboom and Vijay Janapa Reddi. *Edge Impulse: An MLOps Platform for Tiny Machine Learning* 2023. Dostupné z: <https://arxiv.org/abs/2212.03332>
- [71] Edge Impulse. *CI/CD with GitHub Actions* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/tutorials/lifecycle-management/gitactions-docker>
- [72] Edge Impulse. *Edge AI hardware* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/edge-ai-hardware/edge-ai-hardware>
- [73] Edge Impulse. *As a generic C++ library* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/run-inference/cpp-library/deploy-your-model-as-a-c-library>
- [74] Daniel Situnayake. *How TensorFlow helps Edge Impulse make ML accessible to embedded engineers* 2021. Dostupné z: <https://blog.tensorflow.org/2021/06/how-tensorflow-helps-edge-impulse-make-ml-accessible.html>
- [75] Rithik Krisna. *Object Detection using ESP32-CAM and Edge Impulse* 2024. Dostupné z: <https://circuitdigest.com/microcontroller-projects/object-recognition-using-esp32-cam-and-edge-impulse>
- [76] Novac, Pierre-Emmanuel and Boukli Hacene, Ghouthi and Pegatoquet, Alain and Miramond, Benoît and Gripon, Vincent. *Quantization and Deployment of Deep Neural Networks on Microcontrollers* 2021.
- [77] IBM. *What is a neural network?* 2025. Dostupné z: <https://www.ibm.com/think/topics/neural-networks>
- [78] AWS. *What is a neural network?* 2025. Dostupné z: <https://aws.amazon.com/what-is/neural-network/>
- [79] Arthur Arnx. *First neural network for beginners explained (with code)* 2019. Dostupné z: <https://medium.com/data-science/first-neural-network-for-beginners-explained-with-code-4cfd37e06eaf>
- [80] Bergmann, Dave and Stryker, Cole. *What is backpropagation?* 2025. Dostupné z: <https://www.ibm.com/think/topics/backpropagation>
- [81] Alexander S. Gillis. *What is a convolutional neural network (CNN)?* 2025. Dostupné z: <https://www.techtarget.com/searchenterpriseai/definition/convolutional-neural-network>

- [82] Stanford. *Convolutional Neural Networks (CNNs / ConvNets)* 2025. Dostupné z: <https://cs231n.github.io/convolutional-networks>
- [83] Go, Min-soo and Ko, Dae-hwa. *Deep Learning Bible-Types of Neural Networks for Deep Learning* 2025. Dostupné z: <https://wikidocs.net/165345>
- [84] Novac, Pierre-Emmanuel and Boukli Hacene, Ghouthi and Pegatoquet, Alain and Miramond, Benoît and Gripon, Vincent. *Quantization and Deployment of Deep Neural Networks on Microcontrollers* 2021.
- [85] Gaudenz Boesch. *Edge Intelligence: Edge Computing and ML* 2024. Dostupné z: <https://viso.ai/edge-ai/edge-intelligence-deep-learning-with-edge-computing>
- [86] Mike Barmonde. *Understanding Edge AI* 2024. Dostupné z: <https://www.nutanix.com/info/artificial-intelligence/edge-ai>
- [87] Stefan Wallin. *What is Edge AI and why should you use it* 2024. Dostupné z: <https://avassa.io/articles/what-is-edge-ai-and-why-should-you-use-it>
- [88] Ron Karjian. *History and evolution of machine learning: A timeline* 2024. Dostupné z: <https://www.techtarget.com/whatis/feature/History-and-evolution-of-machine-learning-A-timeline>
- [89] Lionel Sujay Vailshery. *Number of Internet of Things (IoT) connections worldwide from 2022 to 2023, with forecasts from 2024 to 2033* 2024. Dostupné z: <https://www.statista.com/statistics/1183457/iot-connected-devices-worldwide>
- [90] Satyajit Sinha. *State of IoT 2024* 2024. Dostupné z: <https://iot-analytics.com/number-connected-iot-devices>
- [91] Jo Kristian Bergum. *Moving ML Inference from the Cloud to the Edge* 2022. Dostupné z: <https://bergum.medium.com/moving-ml-inference-from-the-cloud-to-the-edge-d6f98dbdb2e3>
- [92] Melissa Palmer. *Edge Computing vs. Cloud Computing and What It Means For Your Environment* 2022. Dostupné z: <https://orangematter.solarwinds.com/2022/12/29/edge-vs-cloud-computing/>
- [93] Leonardo Cavagnis. *TinyML: Machine Learning for Embedded System* 2021. Dostupné z: <https://leonardocavagnis.medium.com/tinyml-machine-learning-for-embedded-system-part-i-92a34529e899>
- [94] Mayank Shukla. *Edge AI vs Cloud AI: Quick Insights for Your AI Strategy* 2024. Dostupné z: <https://www.ksolves.com/blog/artificial-intelligence/edge-ai-vs-cloud-ai-quick-insights-for-your-ai-strategy>
- [95] eeDesignIt Editorial. *Making Machine Learning Work on a Microcontroller* 2025. Dostupné z: <https://www.eedesignit.com/making-machine-learning-work-on-a-microcontroller-without-blowing-up-ram>
- [96] Vikram Dattu. *Announcing TensorFlow Lite Micro support on the ESP32* 2020. Dostupné z: <https://blog.tensorflow.org/2020/08/announcing-tensorflow-lite-micro-esp32.htm>
- [97] João Vitor and Yukio Bordin Yamashita. *Gesture Classification with Esp32 and TinyML* 2021. Dostupné z: <https://www.hackster.io/Yukio/gesture-classification-with-esp32-and-tinyml-dab252>
- [98] Jed Huang. *Predictive Maintenance at the Edge* 2022. Dostupné z: <https://www.edgeimpulse.com/blog/predictive-maintenance-at-the-edge>
- [99] Microchip. *Differences Between MCU and MPU Development* 2024. Dostupné z: <https://developerhelp.microchip.com/xwiki/bin/view/products/mcu-mpu/32bit-mpu/differences-between-mcu-and-mpu-development>
- [100] Bryon Moyer. *MPU Vs. MCU* 2020. Dostupné z: <https://semiengineering.com/mpu-vs-mcu/>
- [101] Microsoft. *All about neural processing units (NPUs)* 2025. Dostupné z: <https://support.microsoft.com/en-us/windows/all-about-neural-processing-units-npus-e77a5637-7705-4915-96c8-0c6a975f9db4>
- [102] Antonio Troise. *CPU, GPU, and NPU: Understanding Key Differences and Their Roles in Artificial Intelligence* 2024. Dostupné z: <https://levysoft.medium.com/cpu-gpu-and-npu-understanding-key-differences-and-their-roles-in-artificial-intelligence-2913a24d0747>
- [103] Espressif. *ESP32-S3-EYE v2.2* 2025. Dostupné z: https://github.com/espressif/esp-who/blob/master/docs/en/get-started/ESP32-S3-EYE_Getting_Started_Guide.md
- [104] Seeed studio. *XIAO ESP32S3 Sense & Edge Impulse Keywords Spotting* 2023. Dostupné z: https://wiki.seeedstudio.com/xiao_esp32s3_keyword_spotting/
- [105] Edge Impulse. *Seeed XIAO ESP32 S3 Sense* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/edge-ai-hardware/mcu/seeed-xiao-esp32s3-sense>

- [106] Vanna Winland. *What is feature extraction?* 2025. Dostupné z: <https://www.ibm.com/think/topics/feature-extraction>
- [107] Jacob Murel. *What is feature engineering?* 2025. Dostupné z: <https://www.ibm.com/think/topics/feature-engineering>
- [108] Geeks For Geeks. *What is Feature Engineering?* 2023. Dostupné z: <https://www.geeksforgeeks.org/what-is-feature-engineering/>
- [109] Harshil Patel. *Feature Engineering Explained* 2024. Dostupné z: <https://builtin.com/articles/feature-engineering>
- [110] Linda Rosencrance. *What is feature engineering?* 2021. Dostupné z: <https://www.techtarget.com/searchdatamanagement/definition/feature-engineering>
- [111] Demšar, Janez. *Statistical comparisons of classifiers over multiple data sets* 2006.
- [112] Sebastian Raschka. *Model Evaluation, Model Selection, and Algorithm Selection in Machine Learning* 2020. Dostupné z: <https://arxiv.org/abs/1811.12808>
- [113] Santafe, Guzman and Inza, Inaki and Lozano, Jose A. *Dealing with the evaluation of supervised classification algorithms* 2015.
- [114] Rainio, Oona and Teuvo, Jarmo and Klén, Riku. *Evaluation metrics and statistical tests for machine learning* 2024.
- [115] Edge Impulse. *Evaluation metrics* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/concepts/machine-learning/evaluation-metrics>
- [116] Petra Vidnerová. *Klasifikační metriky* 2025. Dostupné z: https://naucese.python.cz/2020/pydata-praha-jaro/pydata/classification_metrics/
- [117] Geeks For Geeks. *Evaluation Metrics in Machine Learning* 2025. Dostupné z: <https://www.geeksforgeeks.org/metrics-for-machine-learning-model/#logarithmic-loss>
- [118] Microsoft. *LINREGRESE* 2025. Dostupné z: <https://support.microsoft.com/cs-cz/office/linregrese-funkce-84d7d0d9-6e50-4101-977a-fa7abf772b6d>
- [119] Drew Banks. *Mean Average Precision (mAP) 101: Everything You Need to Know* 2022. Dostupné z: <https://www.datalabelify.com/en/mean-average-precision/>
- [120] Pragati Baheti. *Activation Functions in Neural Networks [12 Types & Use Cases]* 2021. Dostupné z: <https://www.v7labs.com/blog/neural-networks-activation-functions>
- [121] Sandeep Kumar. *Comparison of Sigmoid, Tanh and ReLU Activation Functions* 2020. Dostupné z: <https://www.aitude.com/comparison-of-sigmoid-tanh-and-relu-activation-functions/>
- [122] Deepankar Singh. *From Logits to Probabilities: Understanding Softmax in Neural Networks* 2024. Dostupné z: <https://medium.com/ai-enthusiast/from-logits-to-probabilities-understanding-softmax-in-neural-networks-3e95cfe>
- [123] Google. *TensorFlow Lite for Microcontrollers* 2025. Dostupné z: <https://github.com/tensorflow/tflite-micro>
- [124] DFRobot. *Top 8 TinyML Frameworks and Compatible Hardware Platforms* 2025. Dostupné z: <https://www.dfrobot.com/blog-13921.html>
- [125] Silicon Labs. *TensorFlow Lite for Microcontrollers* 2025. Dostupné z: <https://docs.silabs.com/machine-learning/1.3.0/machine-learning-tensorflow-lite-for-microcontrollers>
- [126] Navaneeth Malingan. *TinyML - Getting Started with TensorFlow Lite for Microcontrollers* 2023. Dostupné z: <https://www.scaler.com/topics/tensorflow/tinyml/>
- [127] Espressif. *ESP32-S3 Designed for AIoT applications* 2025. Dostupné z: <https://www.espressif.com/en/products/socs/esp32-s3>
- [128] Marcelo Rovai. *TinyML Made Easy: Image Classification w/ XIAO ESP32S3 Sense* 2023. Dostupné z: <https://www.hackster.io/mjrobot/tinyml-made-easy-image-classification-w-xiao-esp32s3-sense-cb42ae>
- [129] Edge Impulse. *EON Compiler* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/edge-impulse-studio/deployment/eon-compiler>
- [130] Edge Impulse. *MCU* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/edge-ai-hardware/mcu>
- [131] Simone Salerno. *EloquentTinyML* 2025. Dostupné z: <https://github.com/eloquentarduino/EloquentTinyML>
- [132] PlatformIO. *Your Gateway to Embedded Software Development Excellence* 2025. Dostupné z: <https://docs.platformio.org/en/latest/>
- [133] Aurelien Lequertier. *Use PlatformIO to Build Your tinyML Projects* 2025. Dostupné z: <https://www.edgeimpulse.com/blog/platformio/>
- [134] Microsoft. *Visual Studio Code* 2025. Dostupné z: <https://code.visualstudio.com/download>

[135] PlatformIO. *PlatformIO Install* 2025.
Dostupné z: <https://platformio.org/install>

[136] Edge Impulse. *Arduino library* 2025.
Dostupné z: <https://docs.edgeimpulse.com/docs/run-inference/arduino-library>

[137] Eloquentarduino. *Eloquent Edge Impulse* 2025.
Dostupné z: https://github.com/eloquentarduino/eloquent_edgeimpulse

[138] Lark Mullins. *Implementing MLOps with GitHub Actions* 2024.
Dostupné z: <https://dev.to/craftworkai/implementing-mlops-with-github-actions-1knm>

[139] Edge Impluse. *with Docker on Balena* 2025.
Dostupné z: <https://docs.edgeimpulse.com/docs/tutorials/lifecycle-management/ota-model-updates/ota-docker-balena>

[140] Tim Tsai. *Getting started with Docker for Arm on Linux* 2025.
Dostupné z: <https://www.docker.com/blog/getting-started-with-docker-for-arm-on-linux/>

[141] Edge Impulse. *FOMO: Object detection for constrained devices* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/edge-impulse-studio/learning-blocks/object-detection/fomo-object-detection-for-constrained-devices>

[142] Marcelo Rovai. *Exploring Machine Learning with the new XIAO ESP32S3* 2023. Dostupné z: <https://www.hackster.io/mjrobot/exploring-machine-learning-with-the-new-xiao-esp32s3-6463e5>

[143] IBM. *What is semantic segmentation?* 2025.
Dostupné z: <https://www.ibm.com/think/topics/semantic-segmentation>

[144] IBM. *Anomaly detection in machine learning: Finding outliers for optimization of business functions* 2023.
Dostupné z: <https://www.ibm.com/think/topics/machine-learning-for-anomaly-detection>

[145] Sabre PC. *Epochs, Batch Size, Iterations - How are They Important to Training AI and Deep Learning Models* 2024.
Dostupné z: <https://www.sabrepc.com/blog/Deep-Learning-and-AI/Epochs-Batch-Size-Iterations>

[146] Ben Dickson. *FOMO is a TinyML neural network for real-time object detection* 2022. Dostupné z: <https://bdtechtalks.com/2022/04/18/fomo-tinyml-object-detection/>

[147] Edge Impulse. *AI labeling* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/edge-impulse-studio/data-acquisition/ai-labeling>

[148] Edge Impulse. *Edge AI Hardware - Overview* 2025.
Dostupné z: <https://docs.edgeimpulse.com/docs/edge-ai-hardware/edge-ai-hardware>

[149] Edge Impulse. *Custom deployment blocks* 2025.
Dostupné z: <https://docs.edgeimpulse.com/docs/edge-impulse-studio/organizations/custom-blocks/custom-deployment-blocks>

[150] Edge Impulse. *EON Compiler* 2025. Dostupné z: <https://docs.edgeimpulse.com/docs/edge-impulse-studio/deployment/eon-compiler>