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| ***Title*** | ***Reference*** |
| Are machine learning cloud apis used correctly? | WAN, Chengcheng, LIU, Shicheng, HOFFMANN, Henry, et al. Are machine learning cloud apis used correctly? In 2021 IEEE/ACM 43rd International Conference on Software Engineering (ICSE). 2021. |
| Understanding performance problems in deep learning systems | CAO, Junming, CHEN, Bihuan, SUN, Chao, et al. Understanding performance problems in deep learning systems. In: Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering. |
| Software-engineering design patterns for machine learning applications. | WASHIZAKI, Hironori, KHOMH, Foutse, GUÉHÉNEUC, Yann-Gaël, et al. Software-engineering design patterns for machine learning applications. Computer, 2022, vol. 55, no 3, p. 30-39. |
| 23 shades of self-admitted technical debt: An empirical study on machine learning software | OBRIEN, David, BISWAS, Sumon, IMTIAZ, Sayem, et al. 23 shades of self-admitted technical debt: An empirical study on machine learning software. In: Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering. 2022. p. 734-746. |
| Data leakage in notebooks: Static detection and better processes | YANG, Chenyang, BROWER-SINNING, Rachel A., LEWIS, Grace, et al. Data leakage in notebooks: Static detection and better processes. In: Proceedings of the 37th IEEE/ACM International Conference on Automated Software Engineering. 2022. p. 1-12. |
| Compatibility Issues in Deep Learning Systems: Problems and Opportunities. | WANG, Jun, XIAO, Guanping, ZHANG, Shuai, et al. Compatibility Issues in Deep Learning Systems: Problems and Opportunities. In: Proceedings of the 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering. 2023. p. 476-488. |
| Discovering repetitive code changes in python ml systems. | DILHARA, Malinda, KETKAR, Ameya, SANNIDHI, Nikhith, et al. Discovering repetitive code changes in python ml systems. In: Proceedings of the 44th International Conference on Software Engineering. 2022. p. 736-748. |
| Collaboration challenges in building ml-enabled systems: Communication, documentation, engineering, and process. | NAHAR, Nadia, ZHOU, Shurui, LEWIS, Grace, et al. Collaboration challenges in building ml-enabled systems: Communication, documentation, engineering, and process. In: Proceedings of the 44th international conference on software engineering. 2022. p. 413-425. |
| A meta-summary of challenges in building products with ml components–collecting experiences from 4758+ practitioners | NAHAR, Nadia, ZHANG, Haoran, LEWIS, Grace, et al. A meta-summary of challenges in building products with ml components–collecting experiences from 4758+ practitioners. In: 2023 IEEE/ACM 2nd International Conference on AI Engineering–Software Engineering for AI (CAIN). IEEE, 2023. p. 171-183. |
| Api misuse detection method based on transformer | YANG, Jingbo, REN, Jian, et WU, Wenjun. Api misuse detection method based on transformer. In: 2022 IEEE 22nd International Conference on Software Quality, Reliability and Security (QRS). IEEE, 2022. p. 958-969. |
| Adoption and effects of software engineering best practices in machine learning. | SERBAN, Alex, VAN DER BLOM, Koen, HOOS, Holger, et al. Adoption and effects of software engineering best practices in machine learning. In: Proceedings of the 14th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM). 2020. p. 1-12. |
| " Project smells" experiences in analysing the software quality of ML projects with mllint. | VAN OORT, Bart, CRUZ, Luís, LONI, Babak, et al. " Project smells" experiences in analysing the software quality of ML projects with mllint. In : Proceedings of the 44th International Conference on Software Engineering: Software Engineering in Practice. 2022. p. 211-220. |
| Automated testing of software that uses machine learning apis. | WAN, Chengcheng, LIU, Shicheng, XIE, Sophie, et al. Automated testing of software that uses machine learning apis. In: Proceedings of the 44th International Conference on Software Engineering. 2022. p. 212-224. |
| Responsible AI pattern catalogue: A collection of best practices for AI governance and engineering | LU, Qinghua, ZHU, Liming, XU, Xiwei, et al. Responsible AI pattern catalogue: A collection of best practices for AI governance and engineering. ACM Computing Surveys, 2024, vol. 56, no 7, p. 1-35. |
| API Misuse Detection Method Based on Transformer | YANG, Jingbo, REN, Jian, et WU, Wenjun. API Misuse Detection Method Based on Transformer. In : 2022 IEEE 22nd International Conference on Software Quality, Reliability and Security (QRS). IEEE, 2022. p. 958-969. |
| Amazon sagemaker clarify: Machine learning bias detection and explainability in the cloud | HARDT, Michaela, CHEN, Xiaoguang, CHENG, Xiaoyi, et al. Amazon sagemaker clarify: Machine learning bias detection and explainability in the cloud. In : Proceedings of the 27th ACM SIGKDD conference on knowledge discovery & data mining. 2021. p. 2974-2983. |
| Cloud-Driven Machine Learning with AWS: A Comprehensive Review of Services. | RAVINDRANATHAN, Manya K., VADIVU, D. Sendil, et RAJAGOPALAN, Narendran. Cloud-Driven Machine Learning with AWS: A Comprehensive Review of Services. In : 2024 International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (IITCEE). IEEE, 2024. p. 1-8. |
| A survey on bias and fairness in machine learning | MEHRABI, Ninareh, MORSTATTER, Fred, SAXENA, Nripsuta, et al. A survey on bias and fairness in machine learning. ACM computing surveys (CSUR), 2021, vol. 54, no 6, p. 1-35. |
| Investigating the Impact of SOLID Design Principles on Machine Learning Code Understanding. | CABRAL, Raphael, KALINOWSKI, Marcos, BALDASSARRE, Maria Teresa, et al. Investigating the Impact of SOLID Design Principles on Machine Learning Code Understanding. In : Proceedings of the IEEE/ACM 3rd International Conference on AI Engineering-Software Engineering for AI. 2024. p. 7-17. |
| Machine Learning Systems are Bloated and Vulnerable. | ZHANG, Huaifeng, ALHANAHNAH, Mohannad, AHMED, Fahmi Abdulqadir, et al. Machine Learning Systems are Bloated and Vulnerable. Proceedings of the ACM on Measurement and Analysis of Computing Systems, 2024, vol. 8, no 1, p. 1-30. |
| Code smells for machine learning applications | ZHANG, Haiyin, CRUZ, Luís, et VAN DEURSEN, Arie. Code smells for machine learning applications. In : Proceedings of the 1st international conference on AI engineering: software engineering for AI. 2022. p. 217-228. |
| Prevalence of code smells in reinforcement learning projects. | CARDOZO, Nicolás, DUSPARIC, Ivana, et CABRERA, Christian. Prevalence of code smells in reinforcement learning projects. In : 2023 IEEE/ACM 2nd International Conference on AI Engineering–Software Engineering for AI (CAIN). IEEE, 2023. p. 37-42. |
| Sensemaking practices in the everyday work of AI/ML software engineering | WOLF, Christine T. et PAINE, Drew. Sensemaking practices in the everyday work of AI/ML software engineering. In : Proceedings of the IEEE/ACM 42nd International Conference on Software Engineering Workshops. 2020. p. 86-92. |
| Practitioners’ insights on machine-learning software engineering design patterns: a preliminary study | WASHIZAKI, Hironori, TAKEUCHI, Hironori, KHOMH, Foutse, et al. Practitioners’ insights on machine-learning software engineering design patterns: a preliminary study. In : 2020 IEEE International Conference on Software Maintenance and Evolution (ICSME). IEEE, 2020. p. 797-799. |
| Studying Software Engineering Patterns for Designing Machine Learning Systems | WASHIZAKI, Hironori, UCHIDA, Hiromu, KHOMH, Foutse, et al. Studying software engineering patterns for designing machine learning systems. In : 2019 10th International Workshop on Empirical Software Engineering in Practice (IWESEP). IEEE, 2019. p. 49-495. |
| A Systematic Review on Software Design Patterns in Today's Perspective | RAHMAN, Mafizur, CHY, Md Showkat Hossain, et SAHA, Swapnil. A systematic review on software design patterns in today's perspective. In : 2023 IEEE 11th International Conference on Serious Games and Applications for Health (SeGAH). IEEE, 2023. p. 1-8. |
| Identifying Architectural Design Decisions for Achieving Green ML Serving | DURÁN, Francisco, MARTÍNEZ-FERNÁNDEZ, Silverio, MARTINEZ, Matias, et al. Identifying architectural design decisions for achieving green ML serving. In : Proceedings of the IEEE/ACM 3rd International Conference on AI Engineering-Software Engineering for AI. 2024. p. 18-23. |
| How do Machine Learning Projects use Continuous Integration Practices? An Empirical Study on GitHub Actions | BERNARDO, João Helis, DA COSTA, Daniel Alencar, MEDEIROS, Sérgio Queiroz de, et al. How do Machine Learning Projects use Continuous Integration Practices? An Empirical Study on GitHub Actions. In : Proceedings of the 21st International Conference on Mining Software Repositories. 2024. p. 665-676. |
| Scheduling ML training on unreliable spot instances | YANG, Sheng, KHULLER, Samir, CHOUDHARY, Sunav, et al. Scheduling ML training on unreliable spot instances. In : Proceedings of the 14th IEEE/ACM International Conference on Utility and Cloud Computing Companion. 2021. p. 1-8. |
| Data validation for machine learning | POLYZOTIS, Neoklis, ZINKEVICH, Martin, ROY, Sudip, et al. Data validation for machine learning. Proceedings of machine learning and systems, 2019, vol. 1, p. 334-347. |
| Fairness and transparency of machine learning for trustworthy cloud services | ANTUNES, Nuno, BALBY, Leandro, FIGUEIREDO, Flavio, et al. Fairness and transparency of machine learning for trustworthy cloud services. In : 2018 48th Annual IEEE/IFIP International Conference on Dependable Systems and Networks Workshops (DSN-W). IEEE, 2018. p. 188-193. |
| Checkpointing and deterministic training for deep learning | XU, Xiangzhe, LIU, Hongyu, TAO, Guanhong, et al. Checkpointing and deterministic training for deep learning. In : Proceedings of the 1st International Conference on AI Engineering: Software Engineering for AI. 2022. p. 65-76. |
| A study of checkpointing in large scale training of deep neural networks | ROJAS, Elvis, KAHIRA, Albert Njoroge, MENESES, Esteban, et al. A study of checkpointing in large scale training of deep neural networks. arXiv preprint arXiv:2012.00825, 2020. |
| Importance of tuning hyperparameters of machine learning algorithms | WEERTS, Hilde JP, MUELLER, Andreas C., et VANSCHOREN, Joaquin. Importance of tuning hyperparameters of machine learning algorithms. arXiv preprint arXiv:2007.07588, 2020. |
| Automatic tuning of hyperparameters using Bayesian optimization | VICTORIA, A. Helen et MARAGATHAM, Ganesh. Automatic tuning of hyperparameters using Bayesian optimization. Evolving Systems, 2021, vol. 12, no 1, p. 217-223. |
| Quality assurance for artificial intelligence: A study of industrial concerns, challenges and best practices | WANG, Chenyu, YANG, Zhou, LI, Ze Shi, et al. Quality assurance for artificial intelligence: A study of industrial concerns, challenges and best practices. arXiv preprint arXiv:2402.16391, 2024. |
| Intervention fidelity: monitoring drift, providing feedback, and assessing the control condition | BOVA, Carol, JAFFARIAN, Carol, CRAWFORD, Sybil, et al. Intervention fidelity: monitoring drift, providing feedback, and assessing the control condition. Nursing research, 2017, vol. 66, no 1, p. 54-59. |
| Matchmaker: Data drift mitigation in machine learning for large-scale systems | MALLICK, Ankur, HSIEH, Kevin, ARZANI, Behnaz, et al. Matchmaker: Data drift mitigation in machine learning for large-scale systems. Proceedings of Machine Learning and Systems, 2022, vol. 4, p. 77-94. |
| Insights into performance fitness and error metrics for machine learning | Naser, M. Z., and Amir Alavi. "Insights into performance fitness and error metrics for machine learning." arXiv preprint arXiv:2006.00887 (2020). |