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References

- [Abadi et al., 2016] Abadi, M., Chu, A., Goodfellow, I., McMahan, H. B., Mironov, I., Talwar, K., and Zhang, L. (2016). Deep Learning with Differential Privacy. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, pages 308–318.
- [Acemoglu et al., 2007] Acemoglu, D., Antràs, P., and Helpman, E. (2007). Contracts and Technology Adoption. *American Economic Review*, 97(3):916–943.
- [Adhikari et al., 2022] Adhikari, A., Wenink, E., van der Waa, J., Bouter, C., Tolios, I., and Raaijmakers, S. (2022). Towards FAIR Explainable AI: A standardized ontology for mapping XAI solutions to use cases, explanations, and AI systems. In *Proceedings of the 15th International Conference on Pervasive Technologies Related to Assistive Environments*, pages 562–568.
- [Adriaanse and van der Rest, 2020] Adriaanse, J. and van der Rest, J. (2020). Pre-mortem analyse als vitaal onderdeel strategisch plan. simuleer een bijna-doodervaring voor je hotel. *Hospitality Management*, 2020(5):27–30.
- [Agbese et al., 2023] Agbese, M., Mohanani, R., Khan, A., and Abrahamsson, P. (2023). Implementing AI Ethics: Making Sense of the Ethical Requirements. In *Proceedings of the 27th International Conference on Evaluation and Assessment in Software Engineering*, pages 62–71.
- [Agrawal, 2016] Agrawal, V. (2016). Towards the Ontology of ISO/IEC 27005: 2011 Risk Management Standard. In *Clarke, N. and Furnell, S. (ed.): Proceedings of the Tenth International Symposium on Human Aspects of Information Security & Assurance (HAISA)*, pages 101–111.
- [Akata et al., 2020] Akata, Z., Balliet, D., De Rijke, M., Dignum, F., Dignum, V., Eiben, G., Fokkens, A., Grossi, D., Hindriks, K., Hoos, H., et al. (2020). A Research Agenda for Hybrid Intelligence: Augmenting Human Intellect with Collaborative, Adaptive, Responsible, and Explainable Artificial Intelligence. *Computer*, 53(8):18–28.

- [Akyol, 2023] Akyol, S. (2023). Rule-Based Explainable Artificial Intelligence. *Pioneer and Contemporary Studies in Engineering*, pages 305–326.
- [Amer et al., 2013] Amer, M., Daim, T. U., and Jetter, A. (2013). A Review of Scenario Planning. *Futures*, 46:23–40.
- [American Law Institute, 1981] American Law Institute (1981). *Restatement (Second) of Contracts*.
- [Ameyaw et al., 2023] Ameyaw, E. E., Edwards, D. J., Kumar, B., Thurairajah, N., Owusu-Manu, D.-G., and Oppong, G. D. (2023). Critical factors influencing adoption of blockchain-enabled smart contracts in construction projects. *Journal of Construction Engineering and Management*, 149(3):04023003.
- [Anagnoste et al., 2021] Anagnoste, S., Biclesanu, I., D’Ascenzo, F., and Savastano, M. (2021). The Role of Chatbots in End-To-End Intelligent Automation and Future Employment Dynamics. In Dima, A. M. and D’Ascenzo, F., editors, *Business Revolution in a Digital Era*, pages 287–302, Cham, Switzerland. Springer International Publishing.
- [Arrieta et al., 2020] Arrieta, A. B., Díaz-Rodríguez, N., Del Ser, J., Bennetot, A., Tabik, S., Barbado, A., García, S., Gil-López, S., Molina, D., Benjamins, R., et al. (2020). Explainable Artificial Intelligence (XAI): Concepts, taxonomies, opportunities and challenges toward responsible AI. *Information Fusion*, 58:82–115.
- [Athan et al., 2013] Athan, T., Governatori, G., and Palmirani, M. (2013). Legal-ruleml: Xml-based rules and norms for open, rule-based e-contracting. *Journal of Applied Logic*, 11(1):21–34.
- [Attard-Frost et al., 2023] Attard-Frost, B., De los Ríos, A., and Walters, D. R. (2023). The Ethics of AI Business Practices: A review of 47 AI ethics guidelines. *AI and Ethics*, 3(2):389–406.
- [Ayling and Chapman, 2022] Ayling, J. and Chapman, A. (2022). Putting AI ethics to work: are the tools fit for purpose? *AI and Ethics*, 2(3):405–429.
- [Badi et al., 2021] Badi, S., Ochieng, E., Nasaj, M., and Papadaki, M. (2021). Technological, organisational and environmental determinants of smart contracts adoption: UK construction sector viewpoint. *Construction Management and Economics*, 39(1):36–54.
- [Baratella et al., 2022] Baratella, R., Fumagalli, M., Oliveira, Í., and Guizzardi, G. (2022). Understanding and modeling prevention. In *International Conference on Research Challenges in Information Science*, pages 389–405. Springer.

- [Bartneck et al., 2021] Bartneck, C., Lütge, C., Wagner, A., and Welsh, S. (2021). *An Introduction to Ethics in Robotics and AI*. Springer Nature, Cham, Switzerland.
- [Barton, 2002] Barton, T. D. (2002). *Preventive Law: A Methodology for Preventing Problems*. California, United States.
- [Barton, 2006] Barton, T. D. (2006). *Thinking Preventively and Proactively*. Stockholm Institute for Scandinavian Law, Stockholm, Sweden.
- [Barton, 2009] Barton, T. D. (2009). *Preventive Law and Problem Solving: Lawyering for the Future*. Vandeplas Publishing, Florida, United States.
- [Barton, 2016] Barton, T. D. (2016). Re-Designing Law and Lawering for the Information Age. *Notre Dame Journal Of Law, Ethics & Public Policy*, 30:1.
- [Barton et al., 2016] Barton, T. D., Berger-Walliser, G., and Haapio, H. (2016). Contracting for innovation and innovating contracts: an overview and introduction to the special issue. *Journal of Strategic Contracting and Negotiation*, 2(1-2):3–9.
- [Barton et al., 2019] Barton, T. D., Haapio, H., Passera, S., and Hazard, J. G. (2019). Successful Contracts: Integrating Design and Technology. In *Marcelo, C., Fenwick, M and Haapio, H (ed.): Legal Tech, Smart Contracts and Blockchain*, pages 63–91. Springer, Gateway East, Singapore.
- [Bauer, 2019] Bauer, P. C. (2019). Conceptualizing trust and trustworthiness. Technical Report 61, Political Concepts Working Paper Series (Revised Version).
- [Becker and Aloe, 2019] Becker, B. and Aloe, A. M. (2019). Model-based Meta-Analysis and Related Approaches. In *The Handbook of Research Synthesis and Meta-Analysis*, pages 339–364. Russell Sage Foundation.
- [Belém et al., 2021] Belém, C., Balayan, V., Saleiro, P., and Bizarro, P. (2021). Weakly supervised multi-task learning for concept-based explainability. *arXiv preprint arXiv:2104.12459*.
- [Belinkov et al., 2020] Belinkov, Y., Gehrmann, S., and Pavlick, E. (2020). Interpretability and analysis in neural nlp. In *Proceedings of the 58th annual meeting of the association for computational linguistics: tutorial abstracts*, pages 1–5.
- [Berger-Walliser, 2012] Berger-Walliser, G. (2012). The Past and Future of Proactive Law: An Overview of the Development of the Proactive Law Movement. In *Gerlinde Berger-Walliser and Kim Østergaard (ed.): Proactive Law in a Business Environment*, pages 13–31. DJØF Publishing, København, Denmark.

- [Berger-Walliser et al., 2017] Berger-Walliser, G., Barton, T. D., and Haapio, H. (2017). From Visualization to Legal Design: A Collaborative and Creative Process. *American Business Law Journal*, 54(2):347–392.
- [Bernsmed et al., 2018] Bernsmed, K., Frøystad, C., Meland, P. H., Nesheim, D. A., and Rødseth, Ø. J. (2018). Visualizing Cyber Security Risks with Bow-Tie Diagrams. In *Graphical Models for Security: 4th International Workshop, (GraMSec), California, USA, Revised Selected Papers 4*, pages 38–56. Springer Lecture Notes in Computer Science (LNCS), volume 10744.
- [Bertolini et al., 2020] Bertolini, A. et al. (2020). *Artificial Intelligence and Civil Liability*. EPRS: European Parliamentary Research Service, Brussels, Belgium, European Union.
- [Biggers v. Owen, 1888] Biggers v. Owen (1888). 79 Ga. 658, 5 S. E. 193.
- [Bleker and Hortensius, 2014] Bleker, S. and Hortensius, D. (2014). ISO 19600: The Development of a Global Standard on Compliance Management. *Baltzer Science Publishers, Business Compliance*, 2:1–12.
- [Bloem and Reniers, 2019] Bloem, M. and Reniers, G. (2019). Improving the bow-tie method with formalized text analysis. *Journal of Loss Prevention in the Process Industries*, 62:103933.
- [Book, 2012] Book, G. (2012). Lessons Learned from Real World Application of the Bow-tie Method. In *SPE Middle East Health, Safety, Security, and Environment Conference and Exhibition*. OnePetro.
- [Botha, 2019] Botha, A. P. (2019). Innovating for market adoption in the fourth industrial revolution. *South African Journal of Industrial Engineering*, 30(3):187–198.
- [Box, 2013] Box, G. E. P. (2013). An Accidental Statistician: The Life and Memories of George E.P. Box.
- [Bradford, 2023] Bradford, A. (2023). *Digital Empires: The Global Battle to Regulate Technology*. Oxford University Press.
- [Brewer, 2011] Brewer, S. (2011). Logocratic method and the analysis of arguments in evidence. *Law, Probability and Risk*, 10(3):175–202.
- [Brewer, 2017] Brewer, S. (2017). Using propositional deductive logic as an aid to teaching american contract law: The logocratic approach. in *Law and Logic book of Krimphove, Dieter and Lentner, Gabriel M, in Duncker Humblot · Berlin 2017*.

- [Brewer, 2018] Brewer, S. (2018). Indefeasible analogical argument. *Analogy and exemplary reasoning in legal discourse*, pages 33–48.
- [Brewer, 2020] Brewer, S. (2020). Interactive virtue and vice in systems of arguments: a logocratic analysis. *Artificial Intelligence and Law*, 28:151–179.
- [Brewer, 2022] Brewer, S. (2022). First Among Equals: Abduction in Legal Argument from a Logocratic Point of View. In McBride, M. and Penner, J. (ed.): *New Essays on the Nature of Legal Reasoning*, pages 281–340. Hart Publishing, Oxford, United Kingdom.
- [Brewer, 2023] Brewer, S. (2023). Logocratic Agony and the Dream of Theologic: A Comment on Dieter Krimphove’s A Historical Overview of the Development of Legal Logic. See Lentner, G.M. and Lüke, Christoph and Barth, Sven in *Kernfragen des Europäischen Wirtschaftsrechts zwischen Recht, Ökonomie und Theorie, FS für Dieter Krimphove: 227-242, Carl Heinrich Beck, München, Deutschland*.
- [Brown, 1950] Brown, L. M. (1950). *Preventive Law*. Prentice Hall, New York, United States.
- [Brown and Rubin, 1950] Brown, L. M. and Rubin, E. (1950). *Manual of Preventive Law*. Prentice-Hall, New York, United States.
- [Brown et al., 2020] Brown, T., Mann, B., Ryder, N., Subbiah, M., Kaplan, J. D., Dhariwal, P., Neelakantan, A., Shyam, P., Sastry, G., Askell, A., et al. (2020). Language Models are Few-Shot Learners. *Advances in Neural Information Processing Systems*, 33:1877–1901.
- [Cabral, 2020] Cabral, T. S. (2020). Liability and Artificial Intelligence in the EU: Assessing the adequacy of the current Product Liability Directive. *Maastricht Journal of European and Comparative Law*, 27(5):615–635.
- [Cai et al., 2022] Cai, P.-X., Fan, Y.-C., and Leu, F.-Y. (2022). Compare encoder-decoder, encoder-only, and decoder-only architectures for text generation on low-resource datasets. In *Advances on Broad-Band Wireless Computing, Communication and Applications: Proceedings of the 16th International Conference on Broad-Band Wireless Computing, Communication and Applications (BWCCA-2021)*, pages 216–225. Springer.
- [Caruso, 2018] Caruso, D. (2018). Then and now: Mark pettit’s modern unilateral contracts in the 1980s and in the age of blockchains. *BUL Rev.*, 98:1789.
- [Center for Chemical Process Safety, 2018] Center for Chemical Process Safety (2018). *Bow Ties in Risk Management: A Concept Book for Process Safety*. Wiley-AIChE.

- [Chalkidis et al., 2020] Chalkidis, I., Fergadiotis, M., Malakasiotis, P., Aletras, N., and Androutsopoulos, I. (2020). LEGAL-BERT: The Muppets straight out of Law School. *arXiv preprint arXiv:2010.02559*.
- [Chatila et al., 2021] Chatila, R., Dignum, V., Fisher, M., Giannotti, F., Morik, K., Russell, S., and Yeung, K. (2021). Trustworthy AI. *Braunschweig, B. and Challa, M. (ed.): Reflections on Artificial Intelligence for Humanity, Springer*, pages 13–39.
- [Chaveesuk et al., 2020] Chaveesuk, S., Khalid, B., and Chaiyasoonthorn, W. (2020). Understanding Stakeholders Needs for Using Blockchain Based Smart Contracts in Construction Industry of Thailand: Extended TAM Framework. In *13th International Conference on Human System Interaction (HSI)*, pages 137–141. IEEE.
- [Corrales et al., 2019a] Corrales, M., Fenwick, M., and Haapio, H. (2019a). Digital Technologies, Legal Design and the Future of the Legal Profession. In *Marcelo, C., Fenwick, M and Haapio, H (ed.): Legal Tech, Smart Contracts and Blockchain*, pages 1–15. Springer, Gateway East, Singapore.
- [Corrales et al., 2019b] Corrales, M., Fenwick, M., and Haapio, H. (2019b). *Legal Tech, Smart Contracts and Blockchain*. Springer, Gateway East, Singapore.
- [Corrales et al., 2022] Corrales, M., Fenwick, M., Haapio, H., and Vermeulen, E. P. (2022). Integrating law, technology, and design: teaching data protection and privacy law in a digital age. *International Data Privacy Law*, 12(3):239–252.
- [Corrêa et al., 2023] Corrêa, N. K., Galvão, C., Santos, J. W., Del Pino, C., Pinto, E. P., Barbosa, C., Massmann, D., Mambrini, R., Galvão, L., Terem, E., et al. (2023). Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance. *Patterns*, 4(10).
- [Culver, 2004] Culver, K. C. (2004). Varieties of vagueness. *U. Toronto LJ*, 54:109.
- [Danilevsky et al., 2020] Danilevsky, M., Qian, K., Aharonov, R., Katsis, Y., Kawas, B., and Sen, P. (2020). A survey of the state of explainable ai for natural language processing. *arXiv preprint arXiv:2010.00711*.
- [d’Aquin et al., 2018] d’Aquin, M., Troullinou, P., O’Connor, N. E., Cullen, A., Faller, G., and Holden, L. (2018). Towards an “Ethics by Design” Methodology for AI Research Projects. In *Proceedings of the 2018 AAAI/ACM Conference on AI, Ethics, and Society*, pages 54–59.
- [Datta et al., 2022] Datta, A., Fredrikson, M., Leino, K., Lu, K., Sen, S., Shih, R., and Wang, Z. (2022). Exploring conceptual soundness with trulens. In *NeurIPS 2021 Competitions and Demonstrations Track*, pages 302–307. PMLR.

- [Dauer, 1987] Dauer, E. A. (1987). Preventive Law: Above all else, *predict* what people will do! *Preventive Law Reporter*, 6:9.
- [Dauer, 2006] Dauer, E. A. (2006). The Role of Culture in Legal Risk Management. *Scandinavian Studies in Law*, 49:49–6.
- [Dauer, 2008] Dauer, E. A. (2008). Four Principles for a Theory of Preventive Law. In *Haapio, H (ed.): A Proactive Approach to Contracting and Law*, pages 13–33. International Association for Contract and Commercial Management and Turku University of Applied Sciences.
- [De Franceschi and Schulze, 2019] De Franceschi, A. and Schulze, R. (2019). Digital Revolution-New Challenges for Law: Data Protection, Artificial Intelligence, Smart Products, Blockchain Technology and Virtual Currencies. *Carl Heinrich Beck & Nomos*.
- [de Kock, 2014] de Kock, P. A. M. G. (2014). Anticipating Criminal Behaviour: Using The Narrative In Crime-Related Data. *PhD Thesis Tilburg University*.
- [de Ruijter and Guldenmund, 2016] de Ruijter, A. and Guldenmund, F. (2016). The bowtie method: A review. *Safety Science*, 88:211–218.
- [de Sousa Ribeiro and Leite, 2021] de Sousa Ribeiro, M. and Leite, J. (2021). Aligning Artificial Neural Networks and Ontologies towards Explainable AI. In *Proceedings of the AAAI Conference on Artificial Intelligence*, volume 35, pages 4932–4940.
- [Deng and Li, 2019] Deng, A. and Li, Y. (2019). “Intelligent factoring” business model and game analysis in the supply chain based on block chain. *Management Review*, 31(9):231–240.
- [Dhani et al., 2021] Dhani, J. S., Bhatt, R., Ganesan, B., Sirohi, P., and Bhatnagar, V. (2021). Similar Cases Recommendation using Legal Knowledge Graphs. *arXiv preprint arXiv:2107.04771*.
- [Dignum et al., 2018] Dignum, V., Baldoni, M., Baroglio, C., Caon, M., Chatila, R., Dennis, L., Génova, G., Haim, G., Kließ, M. S., Lopez-Sanchez, M., et al. (2018). Ethics by Design: Necessity or Curse? In *Proceedings of the 2018 AAAI/ACM Conference on AI, Ethics, and Society*, pages 60–66.
- [Duan et al., 2017] Duan, Y., Shao, L., Hu, G., Zhou, Z., Zou, Q., and Lin, Z. (2017). Specifying architecture of knowledge graph with data graph, information graph, knowledge graph and wisdom graph. In *2017 IEEE 15th International Conference on Software Engineering Research, Management and Applications (SERA)*, pages 327–332. IEEE.

- [Dudáš et al., 2018] Dudáš, M., Lohmann, S., Svátek, V., and Pavlov, D. (2018). Ontology visualization methods and tools: a survey of the state of the art. *The Knowledge Engineering Review*, 33(e10).
- [Ehrlinger and Wöß, 2016] Ehrlinger, L. and Wöß, W. (2016). Towards a definition of knowledge graphs. *SEMANTiCS (Posters, Demos, SuCCESS)*, 48(1-4):2.
- [El-Ghalayini, 2017] El-Ghalayini, H. (2017). Riskonto: A semantic ontology framework for risk management. In *Proceedings of the 21st Pacific Asia Conference on Information Systems (PACIS)*, page 213.
- [Ersoz et al., 2022] Ersoz, B., Sagiroglu, S., and Bulbul, H. I. (2022). Methods of Explainable Artificial Intelligence (XAI), Trustworthy Artificial Intelligence (TAI) and Interpretable Machine Learning (IML) in Renewable Energy. *International Journal of Smart Grid, icsmartgrid journal*, 6(4):136–143.
- [Es et al., 2023] Es, S., James, J., Espinosa-Anke, L., and Schockaert, S. (2023). Ragas: Automated evaluation of retrieval augmented generation. *arXiv preprint arXiv:2309.15217*.
- [Esayas and Mahler, 2015] Esayas, S. and Mahler, T. (2015). Modelling compliance risk: a structured approach. *Artificial Intelligence and Law*, 23(3):271–300.
- [Escher, 2021] Escher, A. (2021). The nature and value of vagueness in the law: by hrafn asgeirsson, oxford, hart publishing, 2020, 216 pp., £ 58.50 (hardback), isbn 9781849466066.
- [Espenschied, 2010] Espenschied, L. E. (2010). Contract Drafting: Powerful Prose in Transactional Practice. American Bar Association.
- [European-Commission, 2020] European-Commission (2020). *White paper: On Artificial Intelligence - A European approach to excellence and trust*. Eur Lex, European Union.
- [European-Commission, 2021] European-Commission (2021). *Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts*. Eur Lex, European Union.
- [European-Parliament, 2023] European-Parliament (2023). *Artificial Intelligence Act: Proposal for a regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts*. Eur Lex, European Union.
- [European Union, 2016] European Union (2016). Article 22. *Official Journal of the European Union*, 59(4):46. Regulation (EU) 2016/679 (GDPR).

- [Evans, 1986] Evans, P. (1986). *Ari: The Life and Times of Aristotle Socrates Onassis*. Summit Books, New York, United States.
- [Fahad and Qadir, 2008] Fahad, M. and Qadir, M. A. (2008). A Framework for Ontology Evaluation. pages 149–158. ICCS Supplement.
- [Fahad et al., 2008] Fahad, M., Qadir, M. A., and Shah, S. A. H. (2008). Evaluation of Ontologies and DL Reasoners. In Shi, Z., Mercier-Laurent, E., and Leake, D., editors, *International Conference on Intelligent Information Processing: Intelligent Information Processing IV*, pages 17–27, Boston, MA. Springer US.
- [Farber, 1988] Farber, L. (1988). Legal Pragmatism and the Constitution. *Minnesota Law Review*, 72(1331).
- [Feilmayr and Woss, 2016] Feilmayr, C. and Woss, W. (2016). An analysis of ontologies and their success factors for application to business. *Data and Knowledge Engineering*, 101:1–23.
- [Filtz, 2017] Filtz, E. (2017). Building and Processing a Knowledge-Graph for Legal Data. In *European Semantic Web Conference: The Semantic Web*, pages 184–194. Springer.
- [Fisher and Kordupleski, 2019] Fisher, N. I. and Kordupleski, R. E. (2019). Good and bad market research: A critical review of Net Promoter Score. *Applied Stochastic Models in Business and Industry*, 35(1):138–151.
- [Fitch v. Snedaker, 1868] Fitch v. Snedaker (1868). 38 N. Y. 248, 97 Am. Dec. 791.
- [Fox, 2008] Fox, C. M. (2008). Working with Contracts: What Law School Doesn't Teach You. *Practising Law Institute*.
- [Fraser and Roberge, 2016] Fraser, V. and Roberge, J.-F. (2016). Legal Design Lawyering: Rebooting Legal Business Model with Design Thinking. *Pepperdine Dispute Resolution Law Journal*, 16:303.
- [Fuzaylova, 2018] Fuzaylova, E. (2018). War Torts, Autonomous Weapon Systems, and Liability: Why A Limited Strict Liability Tort Regime Should Be Implemented. *Cardozo Law Review*, 40:1327.
- [Gal, 2009] Gal, A. (2009). Ontology Engineering. In Liu, L., Özsu, M.T. (Ed.): *Encyclopedia of Database Systems*, pages 1972–1973. Springer, Boston, Massachusetts.
- [García and Gil, 2008] García, R. and Gil, R. (2008). A Web Ontology for Copyright Contract Management. *International Journal of Electronic Commerce*, 12(4):99–114.

- [García and Gil, 2020] García, R. and Gil, R. (2020). Linked data for enterprise risk management. *Computers in Industry*, 123:103307.
- [Gerdes, 2022] Gerdes, A. (2022). A participatory data-centric approach to AI Ethics by Design. *Applied Artificial Intelligence*, 36(1):2009222.
- [Gerkenmeier and Ratter, 2018] Gerkenmeier, B. and Ratter, B. M. (2018). Multi-risk, multi-scale and multi-stakeholder—the contribution of a bow-tie analysis for risk management in the trilateral Wadden Sea Region. *Journal of Coastal Conservation*, 22:145–156.
- [Gerstenberger et al., 2013] Gerstenberger, M. C., Christophersen, A., Buxton, R., Allinson, G., Hou, W., Leamon, G., and Nicol, A. (2013). Integrated Risk Assessment for CCS. *Energy Procedia*, 37:2775–2782.
- [Gifford, 2018] Gifford, D. G. (2018). Technological Triggers to Tort Revolutions: Steam Locomotives, Autonomous Vehicles, and Accident Compensation. *Journal of Tort Law*, 11(1):71–143.
- [Goldasteh et al., 2022] Goldasteh, P., Akbari, M., Bagheri, A., and Mobini, A. (2022). How high-tech start-ups learn to cross the market chasm? *Journal of Global Entrepreneurship Research*, 12(1):157–173.
- [Golpayegani et al., 2022] Golpayegani, D., Pandit, H. J., and Lewis, D. (2022). Airo: An ontology for representing ai risks based on the proposed eu ai act and iso risk management standards. In *Towards a Knowledge-Aware AI*, pages 51–65. IOS Press.
- [Gomez-Perez, 1995] Gomez-Perez, A. (1995). Some ideas and examples to evaluate ontologies. In *Proceedings of the 11th Conference on Artificial Intelligence for Applications*, pages 299–305. IEEE.
- [Gómez-Pérez et al., 2004] Gómez-Pérez, A., Fernández-López, M., and Corcho, Ó. (2004). *Ontological Engineering: with examples from the areas of Knowledge Management, e-Commerce and the Semantic Web*. Springer Nature.
- [Graziani et al., 2023] Graziani, M., Dutkiewicz, L., Calvaresi, D., Amorim, J. P., Yordanova, K., Vered, M., Nair, R., Abreu, P. H., Blanke, T., Pulignano, V., et al. (2023). A global taxonomy of interpretable AI: unifying the terminology for the technical and social sciences. *Artificial Intelligence Review*, 56(4):3473–3504.
- [Grenon, 2008] Grenon, P. (2008). A primer on knowledge representation and ontological engineering. *Applied ontology. An introduction*, pages 57–81.

- [Gunning et al., 2019] Gunning, D., Stefik, M., Choi, J., Miller, T., Stumpf, S., and Yang, G.-Z. (2019). XAI—Explainable artificial intelligence. *Science Robotics*, 4(37):7120.
- [Gurgun and Koc, 2022] Gurgun, A. P. and Koc, K. (2022). Administrative risks challenging the adoption of smart contracts in construction projects. *Engineering, Construction and Architectural Management*, 29(2):989–1015.
- [Gómez-Pérez, 2001] Gómez-Pérez, A. (2001). Evaluation of ontologies. *International Journal of Intelligent Systems*, 16(3):391–409.
- [Ha et al., 2021] Ha, H. T., Horák, A., and Bui, M. T. (2021). Contract Metadata Identification in Czech Scanned Documents. In *Proceedings of the 15th International Conference on Agents and Artificial Intelligence (ICAART)*, volume 2, pages 795–802.
- [Haapio, 2011] Haapio, H. (2011). Contract Clarity through Visualization—Preliminary Observations and Experiments. In *15th International Conference on Information Visualisation*, pages 337–342. IEEE.
- [Haapio and Siedel, 2013] Haapio, H. and Siedel, G. J. (2013). *A Short Guide to Contract Risk*. Routledge, Oxfordshire, United Kingdom.
- [Haapio and Varjonen, 1998] Haapio, H. and Varjonen, A. (1998). Quality improvement through proactive contracting: contracts are too important to be left to lawyers! In *ASQ World Conference on Quality and Improvement Proceedings*, page 243, Milwaukee, Wisconsin. American Society for Quality.
- [Hagendorff, 2022] Hagendorff, T. (2022). Blind spots in AI ethics. *AI and Ethics*, 2(4):851–867.
- [Hammar, 2014] Hammar, K. (2014). Reasoning Performance Indicators for Ontology Design Patterns. In *Proceedings of the 4th Workshop on Ontology and Semantic Web Patterns in conjunction with the 12th International Semantic Web Conference (ISWC) 2013*. CEUR-WS.
- [Hart, 1958] Hart, H. L. A. (1958). Positivism and the Separation of Law and Morals. *Harvard Law Review*, 71:593–269.
- [Havenel, 2008] Havenel, J. (2008). Peirce’s Clarifications of Continuity. *Transactions of the Charles S. Peirce Society, Indiana University Press*, 44(1):86–133.
- [Hazard and Haapio, 2017] Hazard, J. and Haapio, H. (2017). Wise Contracts: Smart Contracts that Work for People and Machines. In *Schweighofer, E. et al. (ed.): Trends and Communities of Legal Informatics. Proceedings of the 20th*

- International Legal Informatics Symposium IRIS 2017, Österreichische Computer Gesellschaft, Wien, Österreich*, pages 425–432.
- [Helberger and Diakopoulos, 2023] Helberger, N. and Diakopoulos, N. (2023). Chatgpt and the ai act. *Internet Policy Review*, 12(1).
- [Hietanen-Kunwald and Haapio, 2021] Hietanen-Kunwald, P. and Haapio, H. (2021). Effective dispute prevention and resolution through proactive contract design. *Journal of Strategic Contracting and Negotiation*, 5(1-2):3–23.
- [High-Level Expert Group on AI, 2019] High-Level Expert Group on AI (2019). *Ethics guidelines for trustworthy AI*. European Commission, Brussels, Belgium, European Union.
- [Hoffman et al., 2023] Hoffman, R. R., Miller, T., Klein, G., Mueller, S. T., and Clancey, W. J. (2023). Increasing the value of xai for users: A psychological perspective. *KI-Künstliche Intelligenz*, 37(2):237–247.
- [Hogan, 2020] Hogan, A. (2020). Linked Data. In *The Web of Data*, pages 515–625. Springer, Cham, Switzerland.
- [Holzinger et al., 2020] Holzinger, A., Saranti, A., Molnar, C., Biecek, P., and Samek, W. (2020). Explainable AI Methods - A Brief Overview. In *International Workshop on Extending Explainable AI Beyond Deep Models and Classifiers*, pages 13–38. Springer.
- [Hosseini et al., 2023] Hosseini, R., Vlasveld, M., Willemse, J., van de Water, B., Le Dévédec, S. E., and Wolstencroft, K. J. (2023). Fair high content screening in bioimaging. *Scientific Data*, 10(1):462.
- [Huizing et al., 2020] Huizing, A., Veenman, C., Neerincx, M., and Dijk, J. (2020). Hybrid AI: The Way Forward in AI by Developing Four Dimensions. In *International Workshop on the Foundations of Trustworthy AI Integrating Learning, Optimization and Reasoning*, pages 71–76, Cham, Switzerland. Springer.
- [Iphofen and Kritikos, 2021] Iphofen, R. and Kritikos, M. (2021). Regulating Artificial Intelligence and Robotics: Ethics by design in a digital society. *Contemporary Social Science*, 16(2):170–184.
- [ISO, 2018] ISO (2018). *ISO 31000:2018 Risk Management Guidelines*. International Organization for Standardization.
- [ISO, 2020] ISO (2020). *ISO 31022:2020 Risk Management: Guidelines for the management of legal risk*. International Organization for Standardization.

- [Iversen, 2004] Iversen, J. (2004). *Legal Risk Management*. Forlaget Thomson GadJura, Copenhagen, Denmark.
- [Kaltenboeck et al., 2022] Kaltenboeck, M., Boil, P., Verhoeven, P., Sageder, C., Montiel-Ponsoda, E., and Calleja-Ibáñez, P. (2022). Using a Legal Knowledge Graph for Multilingual Compliance Services in Labor Law, Contract Management, and Geothermal Energy. In *Technologies and Applications for Big Data Value*, pages 253–271. Springer, Cham, Switzerland.
- [Katsh and Rabinovich-Einy, 2017] Katsh, M. E. and Rabinovich-Einy, O. (2017). *Digital Justice: Technology and the Internet of Disputes*. Oxford University Press, Oxford, United Kingdom.
- [Katz et al., 2020] Katz, D. M., Coupette, C., Beckedorf, J., and Hartung, D. (2020). Complex societies and the growth of the law. *Nature: Scientific Reports*, 10(1):18737.
- [Kendall and McGuinness, 2019] Kendall, E. F. and McGuinness, D. L. (2019). *Ontology Engineering*. Morgan & Claypool Publishers, California, United States.
- [Khakzad et al., 2012] Khakzad, N., Khan, F., and Amyotte, P. (2012). Dynamic risk analysis using bow-tie approach. *Reliability Engineering & System Safety*, 104:36–44.
- [Khan et al., 2021] Khan, S. N., Loukil, F., Ghedira-Guegan, C., Benkhelifa, E., and Bani-Hani, A. (2021). Blockchain smart contracts: Applications, challenges, and future trends. *Peer-to-peer Networking and Applications*, 14:2901–2925.
- [Kieslich et al., 2022] Kieslich, K., Keller, B., and Starke, C. (2022). Artificial Intelligence Ethics By Design: Evaluating public perception on the importance of ethical design principles of Artificial Intelligence. *Big Data & Society*, 9(1):20539517221092956.
- [Kiser et al., 2008] Kiser, R. L., Asher, M. A., and McShane, B. B. (2008). Let’s Not Make a Deal: An Empirical Study of Decision Making in Unsuccessful Settlement Negotiations. *Journal of Empirical Legal Studies*, 5(3):551–591.
- [Kishchuk et al., 2018] Kishchuk, B., Creed, I., Laurent, K., Nebel, S., Kreutzweiser, D., Venier, L., and Webster, K. (2018). Assessing the ecological sustainability of a forest management system using the ISO Bowtie Risk Management Assessment Tool. *The Forestry Chronicle*, 94(1):25–34.

- [Klein, 2007] Klein, G. (2007). Performing a Project Premortem. *Harvard Business Review*, 85(9):18–19.
- [Knapp et al., 1971] Knapp, C. L., Crystal, N. M., and Prince, H. G. (1971). *Problems in Contract Law*. New York University, School of Law.
- [Knapp et al., 2015] Knapp, C. L., Crystal, N. M., and Prince, H. G. (2015). *Rules of Contract Law: Selections from the Uniform Commercial Code, the CISG, the Restatement (Second) of Contracts, and the UNIDROT Principles, with Material on Contract Drafting, Sample Examination Questions, and Supplemented CISG Cases (Statutory Supplement 2015-2016)*. Wolters Kluwer.
- [Kolvart et al., 2016] Kolvart, M., Poola, M., and Rull, A. (2016). Smart Contracts. In *Kerikmäe, T. and Rull, A. (ed.): The Future of Law and eTechnologies*, pages 133–147. Springer, Cham, Switzerland.
- [Kop, 2021] Kop, M. (2021). Eu Artificial Intelligence Act: The European Approach to AI. Stanford-Vienna Transatlantic Technology Law Forum, Transatlantic Antitrust and IPR Developments, Stanford University, Issue No.2/2021.
- [Koren et al., 2021] Koren, Y., Marash, M., and Stark, E. (2021). Semantic integration of risk and safety data using linked data and ontologies in the bow-tie method. *Safety Science*, 140:105267.
- [Koster et al., 2021] Koster, O., Kosman, R., and Visser, J. (2021). A checklist for explainable ai in the insurance domain. In *International Conference on the Quality of Information and Communications Technology*, pages 446–456. Springer.
- [Kovalerchuk et al., 2021] Kovalerchuk, B., Ahmad, M. A., and Teredesai, A. (2021). Survey of Explainable Machine Learning with Visual and Granular Methods Beyond Quasi-Explanations. *Interpretable Artificial Intelligence: A Perspective of Granular Computing, Studies in Computational Intelligence*, 937, pages 217–267.
- [Kozlova and Aleksandrina, 2020] Kozlova, M. Y. and Aleksandrina, M. (2020). “Smart Contracts” vs Legal Technology in Contract Practice. In *Institute of Scientific Communications Conference: “Smart Technologies” for Society, State and Economy*, pages 1204–1212. Springer.
- [Krishna and Karlapalem, 2008] Krishna, P. R. and Karlapalem, K. (2008). Electronic Contracts. *IEEE Internet Computing*, 12(4):60–68.
- [Kruijff and Weigand, 2017] Kruijff, J. d. and Weigand, H. (2017). Ontologies for Commitment-Based Smart Contracts. In *OTM Confederated International Conferences “On the Move to Meaningful Internet Systems”*, pages 383–398. Springer.

- [Kuwahara et al., 2015] Kuwahara, S., Yoshino, N., Sagara, M., and Hesary, F. T. (2015). Role of the Credit Risk Database in Developing SMEs in Japan: Lessons for the Rest of Asia. *ADB Working Paper 547*.
- [Labatut, 2023] Labatut, B. (2023). *The Maniac*. Pushkin Press, London, United Kingdom.
- [Langdell, 1880] Langdell, C. C. (1880). *A Summary of the Law of Contracts*. Little, Brown, and Company.
- [Larson, 2021] Larson, E. J. (2021). *The Myth of Artificial Intelligence: Why Computers Can't Think the Way We Do*. Harvard University Press, Cambridge, Massachusetts, United States.
- [Laux et al., 2023] Laux, J., Wachter, S., and Mittelstadt, B. (2023). Trustworthy artificial intelligence and the European Union AI Act: on the conflation of trustworthiness and acceptability of risk. *Regulation & Governance*.
- [LeCun et al., 2015] LeCun, Y., Bengio, Y., and Hinton, G. (2015). Deep learning. *nature*, 521(7553):436–444.
- [Lenat and Marcus, 2023] Lenat, D. and Marcus, G. (2023). Getting from Generative AI to Trustworthy AI: What LLMs might learn from Cyc. *arXiv preprint arXiv:2308.04445*.
- [Leva et al., 2017] Leva, M. C., Balfe, N., McAleer, B., and Rocke, M. (2017). Risk registers: Structuring data collection to develop risk intelligence. *Safety Science*, 100, Part B:143–156.
- [Liang et al., 2022] Liang, W., Tadesse, G. A., Ho, D., Fei-Fei, L., Zaharia, M., Zhang, C., and Zou, J. (2022). Advances, challenges and opportunities in creating data for trustworthy AI. *Nature Machine Intelligence*, 4(8):669–677.
- [Limsopatham, 2021] Limsopatham, N. (2021). Effectively leveraging bert for legal document classification. In *Proceedings of the Natural Legal Language Processing Workshop 2021*, pages 210–216.
- [Lin et al., 2021] Lin, S., Hilton, J., and Evans, O. (2021). Truthfulqa: Measuring how models mimic human falsehoods. *arXiv preprint arXiv:2109.07958*.
- [Lockey et al., 2021] Lockey, S., Gillespie, N., Holm, D., and Someh, I. A. (2021). A Review of Trust in Artificial Intelligence: Challenges, Vulnerabilities and Future Directions. *Hawaii International Conference on System Sciences HICSS*, 54(2).

- [Loevinger, 1949] Loevinger, L. (1949). Jurimetrics, *Minnesota Law Review*, 33(455).
- [Longo, 2023] Longo, L. (2023). *Explainable Artificial Intelligence: First World Conference, xAI*. Springer Nature, Lisbon, Portugal, July 26–28, 2023, Proceedings, Part II.
- [López et al., 2012] López, C., Codocedo, V., Astudillo, H., and Cysneiros, L. M. (2012). Bridging the gap between software architecture rationale formalisms and actual architecture documents: An ontology-driven approach. *Science of Computer Programming*, 77(1):66–80.
- [Lu et al., 2015] Lu, L., Liang, W., Zhang, L., Zhang, H., Lu, Z., and Shan, J. (2015). A comprehensive risk evaluation method for natural gas pipelines by combining a risk matrix with a bow-tie model. *Journal of Natural Gas Science and Engineering*, 25:124–133.
- [Luhmann, 2002] Luhmann, N. (2002). *Risk: A Sociological Theory*. Routledge, New York, United States.
- [Madir, 2020] Madir, J. (2020). Smart Contracts-Self-Executing Contracts of the Future? *International In-house Counsel Journal*, 13(51):1.
- [Mahler, 2007] Mahler, T. (2007). Defining Legal Risk. *Proceedings of the Conference "Commercial Contracting For Strategic Advantage - Potentials and Prospects"*, *Turku University of Applied Sciences*, pages 10–31.
- [Mahler and Bing, 2006] Mahler, T. and Bing, J. (2006). Contractual risk management in an ICT context—searching for a possible interface between legal methods and risk analysis. *Scandinavian Studies in Law*, 49:339–357.
- [Mao et al., 2019] Mao, H., Zhou, L., Ifft, J., and Ying, R. (2019). Risk preferences, production contracts and technology adoption by broiler farmers in China. *China Economic Review*, 54:147–159.
- [Martin et al., 2024] Martin, L., Whitehouse, N., Yiu, S., Catterson, L., and Perera, R. (2024). Better Call GPT, Comparing Large Language Models Against Lawyers. *arXiv preprint arXiv:2401.16212*.
- [Mason, 2017] Mason, J. (2017). Intelligent Contracts and the Construction Industry. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 9(3).
- [McHugh, 2012] McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia medica*, 22(3):276–282.

- [McLachlan and Webley, 2021] McLachlan, S. and Webley, L. C. (2021). Visualisation of law and legal Process: An opportunity missed. *Information Visualization*, 20(2-3):192–204.
- [McNamara, 2020] McNamara, A. (2020). Automating the Chaos: Intelligent Construction Contracts. In *Shirowzhan, S. and Zhang, K. (ed.): Smart Cities and Construction Technologies*, pages 119–137. IntechOpen, London, United Kingdom.
- [McNamara and Sepasgozar, 2018] McNamara, A. and Sepasgozar, S. (2018). Barriers and drivers of Intelligent Contract implementation in construction. *42nd AUBEA Conference: Educating Building Professionals for the Future in the Globalised World*, 2.
- [McNamara and Sepasgozar, 2020] McNamara, A. J. and Sepasgozar, S. M. (2020). Developing a theoretical framework for intelligent contract acceptance. *Construction Innovation*, 20(3):421–445.
- [McNamara and Sepasgozar, 2021] McNamara, A. J. and Sepasgozar, S. M. (2021). Intelligent contract adoption in the construction industry: Concept development. *Automation in Construction*, 122(103452).
- [McWhinney, 2002] McWhinney, W. (2002). Grammars Of Engagement. *Human and Organizational*.
- [Michael et al., 2020] Michael, K., Abbas, R., Roussos, G., Scornavacca, E., and Fosso-Wamba, S. (2020). Ethics in AI and Autonomous System Applications Design. *IEEE Transactions on Technology and Society*, 1(3):114–127.
- [Mik, 2017] Mik, E. (2017). Smart contracts: terminology, technical limitations and real world complexity. *Law, innovation and technology*, 9(2):269–300.
- [Mökander and Floridi, 2021] Mökander, J. and Floridi, L. (2021). Ethics-Based Auditing to Develop Trustworthy AI. *Minds and Machines*, 31(2):323–327.
- [Mökander and Floridi, 2023] Mökander, J. and Floridi, L. (2023). Operationalising AI governance through ethics-based auditing: an industry case study. *AI and Ethics*, 3(2):451–468.
- [Montiel-Ponsoda et al., 2018] Montiel-Ponsoda, E., Gracia, J., and Rodríguez-Doncel, V. (2018). Building the Legal Knowledge Graph for Smart Compliance Services in Multilingual Europe. In *Proceedings of the 1st Workshop on Technologies for Regulatory Compliance*, volume 2049. CEUR Workshop Proceedings.

- [Moore and McKenna, 1999] Moore, G. A. and McKenna, R. (1999). Crossing the Chasm.
- [Mueller and Massaron, 2018] Mueller, J. and Massaron, L. (2018). Artificial Intelligence for Dummies. newark: For dummies.
- [Muhlenbach, 2020] Muhlenbach, F. (2020). A Methodology for Ethics-by-Design AI Systems: Dealing with Human Value Conflicts. In *2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, pages 1310–1315. IEEE.
- [Munn, 2023] Munn, L. (2023). The uselessness of AI ethics. *AI and Ethics*, 3(3):869–877.
- [Nay, 2023] Nay, J. J. (2023). Large Language Models as Fiduciaries: A Case Study Toward Robustly Communicating With Artificial Intelligence Through Legal Standards. *arXiv preprint arXiv:2301.10095*.
- [Niiniluoto, 1999] Niiniluoto, I. (1999). Defending Abduction. *Philosophy of Science: Proceedings of the 1998 Biennial Meetings of the Philosophy of Science Association, Part I, Contributed Papers*, 66(S3: SUPPLEMENT):S436–S451.
- [Nirenburg and Raskin, 2001] Nirenburg, S. and Raskin, V. (2001). Ontological semantics, formal ontology, and ambiguity. In *Proceedings of the International Conference on Formal Ontology in Information Systems - Volume 2001*, FOIS '01, page 151–161, New York, NY, USA. Association for Computing Machinery.
- [Niu et al., 2021] Niu, Z., Zhong, G., and Yu, H. (2021). A review on the attention mechanism of deep learning. *Neurocomputing*, 452:48–62.
- [Offord v. Davies, 1862] Offord v. Davies (1862). 12 C. B. (N. S.) 748.
- [Oliveira et al., 2022] Oliveira, Í., Sales, T. P., Baratella, R., Fumagalli, M., and Guizzardi, G. (2022). An ontology of security from a risk treatment perspective. In *International conference on conceptual modeling*, pages 365–379. Springer.
- [Palmirani et al., 2018] Palmirani, M., Governatori, G., and Martoni, M. (2018). Legalruleml: Design principles and foundations. *Artificial Intelligence and Law*, 26(3):215–262.
- [Papinianus, 2003] Papinianus (2003). *The Lawyer*. Hestia Publishers Book-sellers, Athens, Greece - Translated from Greek.

- [Paredaens et al., 2012] Paredaens, J., De Bra, P., Gyssens, M., and Van Gucht, D. (2012). *The Structure of the Relational Database Model*, volume 17. Springer Science & Business Media, Cham, Switzerland.
- [Patterson and Neailey, 2002] Patterson, F. D. and Neailey, K. (2002). A Risk Register Database System to aid the management of project risk. *International Journal of Project Management*, 20(5):365–374.
- [Peirce, 1903] Peirce, C. S. (1903). Harvard Lectures on Pragmatism. *Collected Papers, Belknap Press of Harvard University Press*, 5:188–189.
- [Petterson v. Pattberg, 1928] Petterson v. Pattberg (1928). 248:86.
- [Pham et al., 2021] Pham, T. T., Dang, H. L., Pham, N. T. A., and Dang, H. D. (2021). Adoption of contract farming for managing agricultural risks: A case study in rice production in the Mekong Delta, Vietnam. *Journal of Agribusiness in Developing and Emerging Economies*.
- [Pillai and Adavi, 2013] Pillai, M. and Adavi, P. (2013). Intelligent Contract Management. *International Journal of Scientific and Research Publications*, 3(1).
- [Posthumus et al., 2012] Posthumus, B., Limonard, S., Schoonhoven Van, B., and Verhagen, P. (2012). Business Modelling and Adoption Methodologies State-of-the-Art.
- [Ribes et al., 2021] Ribes, D., Henchoz, N., Portier, H., Defayes, L., Phan, T.-T., Gatica-Perez, D., and Sonderegger, A. (2021). Trust indicators and explainable AI: A study on user perceptions. In *Human-Computer Interaction—INTERACT 2021: 18th IFIP TC 13 International Conference, Bari, Italy, August 30–September 3, 2021, Proceedings, Part II* 18, pages 662–671. Springer.
- [Rieder et al., 2021] Rieder, G., Simon, J., and Wong, P.-H. (2021). Mapping the Stony Road toward Trustworthy AI: Expectations, Problems, Conundrums. In *Pellilo, M. and Scantamburlo, T.: Machines We Trust: Perspectives on Dependable AI*, MIT Press, pages 3, 27.
- [Rios-Campos et al., 2023] Rios-Campos, C., Vega, S. M. Z., Tejada-Castro, M. I., Viteri, J. D. C. L., Zambrano, E. O. G., Gamarra, J. M. B., Núñez, J. B., and Vara, F. E. O. (2023). Ethics of Artificial Intelligence. *South Florida Journal of Development*, 4(4):1715–1729.
- [Rissland and Ashley, 1987] Rissland, E. L. and Ashley, K. D. (1987). *HYPO: A Precedent-Based Legal Reasoner*. Department of Computer and Information Science, University of Massachusetts, Connecticut, Massachusetts, United States.

- [Rossi and Haapio, 2019] Rossi, A. and Haapio, H. (2019). Proactive Legal Design: Embedding Values in the Design of Legal Artefacts. In *Schweighofer, E., Kummer, F. and Saarenpää, A. (ed.): Internet of Things. Proceedings of the 22nd International Legal Informatics Symposium IRIS*, pages 537–544. Weblaw.
- [Ryjov, 2021] Ryjov, A. (2021). Hybrid Intelligence: Main Concepts and Application Scenarios. In *World Organization of Systems and Cybernetics Congress*, pages 183–190. Springer.
- [Sainz, 2020] Sainz, J. A. V. (2020). Legal Design Thinking, visuales en los contratos y su validez legal. *Revista Jurídica Austral*, 1(1):303–318.
- [Salih et al., 2024] Salih, A. M., Raisi-Estabragh, Z., Galazzo, I. B., Radeva, P., Petersen, S. E., Lekadir, K., and Menegaz, G. (2024). A perspective on explainable artificial intelligence methods: Shap and lime. *Advanced Intelligent Systems*, page 2400304.
- [Sánchez-Zas et al., 2023] Sánchez-Zas, C., Villagrà, V. A., Vega-Barbas, M., Larriva-Novo, X., Moreno, J. I., and Berrocal, J. (2023). Ontology-based approach to real-time risk management and cyber-situational awareness. *Future Generation Computer Systems*, 141:462–472.
- [Sanderson et al., 2023] Sanderson, C., Douglas, D., Lu, Q., Schleiger, E., Whittle, J., Lacey, J., Newnham, G., Hajkowicz, S., Robinson, C., and Hansen, D. (2023). AI Ethics Principles in Practice: Perspectives of Designers and Developers. *IEEE Transactions on Technology and Society*, 4(2).
- [Sarker et al., 2020] Sarker, M. K., Schwartz, J., Hitzler, P., Zhou, L., Nadella, S., Minnery, B., Juvina, I., Raymer, M. L., and Aue, W. R. (2020). Wikipedia Knowledge Graph for Explainable AI. In *Iberoamerican Knowledge Graphs and Semantic Web Conference: Knowledge Graphs and Semantic Web*, pages 72–87. Springer.
- [Schlag, 1996] Schlag, P. (1996). Hiding The Ball. *New York University Law Review*, 71(1681).
- [Schneider et al., 2022] Schneider, J. M., Rehm, G., Montiel-Ponsoda, E., Rodríguez-Doncel, V., Martín-Chozas, P., Navas-Loro, M., Kaltenböck, M., Revenko, A., Karampatakis, S., Sageder, C., et al. (2022). Lynx: A knowledge-based AI service platform for content processing, enrichment and analysis for the legal domain. *Information Systems*, 106(101966).
- [Scholtes, 2021] Scholtes, J. (2021). The legaltech bridge. In *Meesterlijk: Liber amicorum ter gelegenheid van het emeritaat van prof. dr. Jaap van den Herik*, hoogleraar

- Recht en Informatica te Leiden*, pages 85–87. Leiden University, E. M. Meijers Instituut.
- [Scholtes, 2024] Scholtes, J. (2024). *Measuring Quality in NLP*. Maastricht University.
- [Schultz and Seele, 2023] Schultz, M. D. and Seele, P. (2023). Towards AI Ethics’ Institutionalization: Knowledge bridges from business ethics to advance organizational AI ethics. *AI and Ethics*, 3(1):99–111.
- [Sheehan, 2023] Sheehan, M. (2023). China’s AI Regulations and How They Get Made. *Carnegie Endowment for International Piece*, 2:2003.
- [Shuey v. United States, 1875] Shuey v. United States (1875). 92 U.S. 73, 23 L. Ed. 697.
- [Siedel and Haapio, 2010] Siedel, G. J. and Haapio, H. (2010). Using Proactive Law for Competitive Advantage. *American Business Law Journal*, 47(4):641–686.
- [Simion and Kelp, 2023] Simion, M. and Kelp, C. (2023). Trustworthy artificial intelligence. *Asian Journal of Philosophy*, 2(1):8.
- [Simon, 1985] Simon, L. (1985). The Authority of the Constitution and Its Meaning: A Preface to a Theory of Constitutional Interpretation. *Southern California Law Review*, 58(603).
- [Singh and Karwayun, 2010] Singh, S. and Karwayun, R. (2010). A Comparative Study of Inference Engines. In *2010 Seventh International Conference on Information Technology: New Generations*, pages 53–57. IEEE.
- [Smits, 2017] Smits, J. M. (2017). *Contract Law: A Comparative Introduction*. Edward Elgar Publishing, Surrey, United Kingdom.
- [Smuha, 2019] Smuha, N. A. (2019). The EU Approach to Ethics Guidelines for Trustworthy Artificial Intelligence. *Computer Law Review International*, 20(4):97–106.
- [Smuha et al., 2021] Smuha, N. A., Ahmed-Rengers, E., Harkens, A., Li, W., MacLaren, J., Piselli, R., and Yeung, K. (2021). How the EU can Achieve Legally Trustworthy AI: A Response to the European Commission’s Proposal for an Artificial Intelligence Act. *SSRN 3899991*.
- [Soames, 2012] Soames, S. (2012). Vagueness and the law. In *The Routledge companion to philosophy of law*, pages 95–108. Routledge.

- [Sovrano et al., 2020] Sovrano, F., Palmirani, M., and Vitali, F. (2020). Legal Knowledge Extraction for Knowledge Graph Based Question-Answering. In *Legal Knowledge and Information Systems: Frontiers in Artificial Intelligence and Applications*, pages 143–153. IOS Press, Online.
- [Stahl, 2022] Stahl, B. C. (2022). From Computer Ethics and the Ethics of AI Towards an Ethics of Digital Ecosystems. *AI and Ethics*, 2(1):65–77.
- [Stålhane et al., 2003] Stålhane, T., Dingsøyr, T., Hanssen, G. K., and Moe, N. B. (2003). Post Mortem—An assessment of two approaches. *Empirical Methods and Studies in Software Engineering: Experiences from ESERNET*, pages 129–141.
- [Stark, 2013] Stark, T. L. (2013). *Drafting Contracts: How and Why Lawyers Do What They Do*. Aspen Publishing, California, United States.
- [Stathis, 2018] Stathis, G. (2018). The shock of legal tech: No one ignorant of technology should read this. *Legal Business World*, (7):54–59.
- [Stathis, 2021] Stathis, G. (2021). A scarce personality. In *Meesterlijk: Liber amicorum ter gelegenheid van het emeritaat van prof. dr. Jaap van den Herik, hoogleraar Recht en Informatica te Leiden*, pages 85–87. Leiden University, E. M. Meijers Instituut.
- [Stathis, 2024a] Stathis, G. (2024a). AI Programming of Mimetic Theory. In *Annual Conference on Violence and Religion on Artificial Intelligence 2021*. Bloomsbury Press. London, United Kingdom.
- [Stathis, 2024b] Stathis, G. (2024b). Explainable Large Language Models & iContracts. In *the Proceedings of the 16th International Conference on Agents and Artificial Intelligence (ICAART)*, 3:1378–1385.
- [Stathis et al., 2023a] Stathis, G., Biagioni, G., de Graaf, K. A., Trantas, A., and van den Herik, H. J. (2023a). The Value of Proactive Data for Intelligent Contracts. *World Conference on Smart Trends in Systems, Security and Sustainability (WorldS4), Intelligent Sustainable Systems, Springer Lecture Notes in Networks Systems (LNNS)*, 803:107–125.
- [Stathis et al., 2023b] Stathis, G., Biagioni, G., Trantas, A., van den Herik, H. J., and Custers, B. (2023b). A Visual Analysis of Hazardous Events in Contract Risk Management. In *the Proceedings of 12th International Conference on Data Science, Technology and Applications (DATA)*, 1:227–234.
- [Stathis et al., 2024] Stathis, G., Trantas, A., Biagioni, G., de Graaf, K. A., Adrijaanse, J. A. A., and van den Herik, H. J. (2024). Designing an Intelligent Contract with Communications and Risk Data. *Springer Nature Com-*

- puter Science (SNCS): *Recent Trends on Agents and Artificial Intelligence*, 5(709). <https://doi.org/10.1007/s42979-024-03021-x>.
- [Stathis et al., 2023c] Stathis, G., Trantas, A., Biagioni, G., and van den Herik, H. J. (2023c). Risk Visualisation for Trustworthy Intelligent Contracts. In *the Proceedings of the 21st International Industrial Simulation Conference (ISC), EUROSIS-ETI*, pages 53–57.
- [Stathis et al., 2023d] Stathis, G., Trantas, A., Biagioni, G., van den Herik, H. J., Custers, B., Daniele, L., and Katsigiannis, T. (2023d). Towards a Foundation for Intelligent Contracts. In *the Proceedings of the 15th International Conference on Agents and Artificial Intelligence (ICAART)*, 2:87–98.
- [Stathis and van den Herik, 2024] Stathis, G. and van den Herik, H. J. (2024). Ethical & Preventive Legal Technology. *Springer AI and Ethics*. <https://doi.org/10.1007/s43681-023-00413-2>.
- [Susskind, 1996] Susskind, R. (1996). *The Future of Law: Facing the Challenges of Information Technology*. Oxford, United Kingdom.
- [Susskind, 2008] Susskind, R. (2008). *The End of Lawyers? Rethinking the Nature of Legal Services*. Oxford University Press, Oxford, United Kingdom.
- [Susskind, 2019] Susskind, R. (2019). *Online Courts and the Future of Justice*. Oxford University Press, Oxford, United Kingdom.
- [Timmer, 2019] Timmer, I. (2019). Contract Automation: Experiences from Dutch Legal Practice. In *Legal Tech, Smart Contracts and Blockchain*, pages 147–171. Springer, Singapore.
- [Tjong Tjin Tai, 2018] Tjong Tjin Tai, E. (2018). Liability for (Semi) Autonomous Systems: Robots and Algorithms. Mak, V., Tjong Tjin Tai, E., Berlee, A. (ed.): *Research Handbook on Data Science and Law*, Edward Elgar, pages 55–82.
- [Turing, 1950] Turing, A. M. (1950). Computing Machinery and Intelligence. *Mind*, 49(433):460.
- [Ullah and Al-Turjman, 2021] Ullah, F. and Al-Turjman, F. (2021). A conceptual framework for blockchain smart contract adoption to manage real estate deals in smart cities. *Neural Computing and Applications*, 35:1–22.
- [van den Herik, 1991] van den Herik, H. J. (1991). *Can Computers Judge Court Cases? (Kunnen Computers Rechtspreken?)*. Gouda Quint, Arnhem. Inaugural address Leiden University, 21st June 1991.

- [van den Herik, 2015] van den Herik, H. J. (2015). Computers And Intuition. *ICGA Journal*, 38(4):195–208.
- [van den Herik, 2016] van den Herik, H. J. (2016). Intuition Is Programmable. *Valedictory Address Tilburg University*.
- [van den Herik, 2023] van den Herik, H. J. (2023). History and Future of AI. *European Conference on Artificial Intelligence, Kraków, Poland, Invited Lecture, October 3*.
- [van den Herik and Stathis, 2024] van den Herik, H. J. and Stathis, G. (2024). How a Setback Stimulated AI in China. *Law and Artificial Intelligence, Huazhong University of Science and Technology Press (accepted)*.
- [van der Waa et al., 2021] van der Waa, J., Nieuwburg, E., Cremers, A., and Neerincx, M. (2021). Evaluating XAI: A comparison of rule-based and example-based explanations. *Artificial Intelligence*, 291:103404.
- [van Gerven et al., 2001] van Gerven, W., Droshout, D., Lever, J. F., and Larouche, P. (2001). *Tort Law: Ius Commune Casebooks for the Common Law of Europe*. Hart Publishing, Oxford, United Kingdom.
- [van Kuijk et al., 2019] van Kuijk, J., Daalhuizen, J., and Christiaans, H. (2019). Drivers of usability in product design practice: Induction of a framework through a case study of three product development projects. *Design Studies*, 60:139–179.
- [van Kuijk and Staats, 2012] van Kuijk, J. and Staats, R. (2012). *Design for Usability: Methods & Tools: A practitioner's guide*. IOP IPCR Design for Usability research project.
- [Varona and Suárez, 2022] Varona, D. and Suárez, J. L. (2022). Discrimination, Bias, Fairness, and Trustworthy AI. *Applied Sciences*, 12(12):5826.
- [Vaswani et al., 2017] Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., Kaiser, Ł., and Polosukhin, I. (2017). Attention is All you Need. *Advances in Neural Information Processing Systems*, 30.
- [Verheij, 2003] Verheij, B. (2003). Artificial argument assistants for defeasible argumentation. *Artificial Intelligence*, 150(1-2):291–324.
- [Vieira et al., 2010] Vieira, S. M., Kaymak, U., and Sousa, J. M. (2010). Cohen's kappa coefficient as a performance measure for feature selection. In *International conference on fuzzy systems*, pages 1–8. IEEE.

- [Vihul, 2020] Vihul, L. (2020). International Legal Regulation of Autonomous Technologies. *Modern Conflict and Artificial Intelligence, Centre for International Governance Innovation*.
- [Vollert et al., 2021] Vollert, S., Atzmueller, M., and Theissler, A. (2021). Interpretable Machine Learning: A brief survey from the predictive maintenance perspective. In *2021 26th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA)*, pages 01–08. IEEE.
- [von Eschenbach, 2021] von Eschenbach, W. J. (2021). Transparency and the Black Box Problem: Why we do not trust AI. *Philosophy & Technology*, 34(4):1607–1622.
- [von Westphalen, 2017] von Westphalen, F. G. (2017). Contracts with Big Data: The End of the Traditional Contract Concept? In *Trading Data in the Digital Economy: Legal Concepts and Tools*, pages 245–270. Nomos Verlagsgesellschaft mbH & Co. KG.
- [Walton et al., 2008] Walton, D., Reed, C., and Macagno, F. (2008). *Argumentation Schemes*. Cambridge University Press.
- [Walton, 1996] Walton, D. N. (1996). *Argument Structure: A Pragmatic Theory*. University of Toronto Press Toronto.
- [Walton, 2018] Walton, P. (2018). Artificial intelligence and the limitations of information. *Information*, 9(12):332.
- [Warrens, 2014] Warrens, M. J. (2014). New interpretations of cohen’s kappa. *Journal of Mathematics*, 2014(1):203907.
- [Wendehorst, 2020] Wendehorst, C. (2020). Strict Liability for AI and other Emerging Technologies. *Journal of European Tort Law*, 11(2):150–180.
- [Werbach, 2018] Werbach, K. (2018). *The Blockchain and the New Architecture of Trust*. Mit Press.
- [Wexler, 2000] Wexler, D. (2000). Therapeutic Jurisprudence: An Overview. *Thomas M. Cooley Law Review*, 17(125).
- [Williams, 2024] Williams, S. (2024). Generative Contracts. *Arizona State Law Journal, Forthcoming*.
- [Williston, 2024] Williston, S. (2024). *Williston on Contracts*, volume § 73. West Group, 4th edition. Updated annually.

- [Winikoff et al., 2021] Winikoff, M., Sidorenko, G., Dignum, V., and Dignum, F. (2021). Why bad coffee? Explaining BDI agent behaviour with valuing. *Artificial Intelligence*, 300:103554.
- [Wormser, 1916] Wormser, I. M. (1916). True conception of unilateral contracts. *Yale LJ*, 26:136.
- [Wu et al., 2024] Wu, K., Wu, E., and Zou, J. (2024). How faithful are rag models? quantifying the tug-of-war between rag and llms' internal prior. *arXiv preprint arXiv:2404.10198*.
- [Wu, 2021] Wu, Y. (2021). Summary of Research on Contract Risk Management of EPC General Contracting Project—Based on VOSviewer Knowledge Graph Analysis. In *International Symposium on Advancement of Construction Management and Real Estate: Proceedings of the 25th International Symposium on Advancement of Construction Management and Real Estate*, pages 1043–1058. Springer.
- [Xu et al., 2019] Xu, F., Uszkoreit, H., Du, Y., Fan, W., Zhao, D., and Zhu, J. (2019). Explainable AI: A Brief Survey on History, Research Areas, Approaches and Challenges. In *Natural Language Processing and Chinese Computing: 8th CCF International Conference, NLPCC 2019, Dunhuang, China, October 9–14, 2019, Proceedings, Part II 8*, pages 563–574. Springer.
- [Yankovskiy, 2019] Yankovskiy, R. M. (2019). Legal Design: New Thinking and New Challenges. *Legal Design: New Challenges and New Opportunities*, (5):76–86.
- [Yu et al., 2021] Yu, H., Li, H., et al. (2021). A Knowledge Graph Construction Approach for Legal Domain. *Tehnički vjesnik*, 28(2):357–362.
- [Zelevnikow, 2023] Zelevnikow, J. (2023). The benefits and dangers of using machine learning to support making legal predictions. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, 13(4):e1505.
- [Zheng et al., 2020] Zheng, Z., Xie, S., Dai, H.-N., Chen, W., Chen, X., Weng, J., and Imran, M. (2020). An overview on smart contracts: Challenges, advances and platforms. *Future Generation Computer Systems*, 105:475–491.
- [Zhou et al., 2020] Zhou, X., Lim, M. Q., and Kraft, M. (2020). A Smart Contract-based agent marketplace for the J-Park Simulator - a knowledge graph for the process industry. *Computers & Chemical Engineering*, 139(106896).