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| Autore                  | Kaddoura Sanaa  |
| Titolo                  | A Primer on Generative Adversarial Networks [[electronic resource] /] /<br>by Sanaa Kaddoura  |
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| Edizione                | [1st ed. 2023.]   |
| Descrizione fisica      | 1 online resource (91 pages)  |
| Collana                 | SpringerBriefs in Computer Science, , 2191-5776   |
| Disciplina              | 006.31  |
| Soggetti                | Machine learning<br>Signal processing<br>Computer simulation<br>Machine Learning<br>Signal, Speech and Image Processing<br>Computer Modelling   |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di contenuto       | Overview of GAN Structure -- Your First GAN -- Real World<br>Applications -- Conclusion.  |
| Sommario/riassunto      | This book is meant for readers who want to understand GANs without the need for a strong mathematical background. Moreover, it covers the practical applications of GANs, making it an excellent resource for beginners. A Primer on Generative Adversarial Networks is suitable for researchers, developers, students, and anyone who wishes to learn about GANs. It is assumed that the reader has a basic understanding of machine learning and neural networks. The book comes with ready-to-run scripts that readers can use for further research. Python is used as the primary programming language, so readers should be familiar with its basics. The book starts by providing an overview of GAN architecture, explaining the concept of generative models. It then introduces the most straightforward GAN architecture, which explains how GANs work and covers the concepts of generator and discriminator. The book then goes into the more advanced real-world applications of GANs, such as human face generation, deep fake, |

CycleGANs, and more. By the end of the book, readers will have an essential understanding of GANs and be able to write their own GAN code. They can apply this knowledge to their projects, regardless of whether they are beginners or experienced machine learning practitioners.

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