

1. Record Nr.	UNINA9910617306603321
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Titolo	Building quality shaders for Unity® : using shader graphs and HLSL shaders // Daniel Ilett
Pubbl/distr/stampa	Berkeley, California : , : Apress L. P., , [2022] ©2022
ISBN	1-4842-8652-9
Descrizione fisica	1 online resource (745 pages)
Disciplina	929.605
Soggetti	Computer graphics Computer games - Programming Three-dimensional display systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
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Sommario/riassunto

Understand what shaders are and what they're used for: Shaders are often seen as mystical and difficult to develop, even by skilled programmers, artists, and developers from other game design disciplines. This book dispels that idea by building up your shader knowledge in stages, starting with fundamental shader mathematics and how shader development mindset differs from other types of art and programming, and slowly delves into topics such as vertex and fragment shaders, lighting, depth-based effects, texture mapping, and Shader Graph. This book presents each of these topics with a comprehensive breakdown, the required theory, and some practical applications for the techniques learned during each chapter. The HLSL (High Level Shading Language) code and Shader Graphs will be provided for each relevant section, as well as plenty of screenshots. By the end of this book, you will have a good understanding of the shader development pipeline and you will be fully equipped to start making your own aesthetic and performant shader effects for your own games!

You Will Learn To " Use shaders across Unity's rendering pipelines " Write shaders and modify their behavior with C# scripting " Use Shader Graph for codeless development " Understand the important math behind shaders, particularly space transformations " Profile the performance of shaders to identify optimization targets

Who Is This Book For This book is intended for beginners to shader development, or readers who may want to make the jump from shader code to Shader Graph. It will also include a section on shader examples for those who already know the fundamentals of shaders and are looking for specific use cases.
