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	Nota di contenuto	1. Basics -- 2. Particle-based simulation -- 3. Grid-based simulation -- 4. Hybrid solvers.
	Sommario/riassunto	"From the splash of breaking waves to turbulent swirling smoke the mathematical dynamics of fluids are varied and continue to be one of the most challenging aspects in animation. Fluid Engine Development demonstrates how to create a working fluid engine through the use of particles and grids and even a combination of the two. Core algorithms are explained from a developer's perspective in a practical approachable way that will not overwhelm readers. The Code Repository offers further opportunity for growth and discussion with continuously changing content and source codes. This book helps to serve as the ultimate guide to navigating complex fluid animation and development. Key Features • Explains how to create a fluid simulation engine from scratch. • Offers an approach that is code-oriented rather

than math-oriented allowing readers to learn how fluid dynamics works with code with downloadable code available. • Explores various kinds of simulation techniques for fluids using particles and grids. • Discusses practical issues such as data structure design and optimizations. • Covers core numerical tools including linear system and level set solvers."