COMPUTER GRAPHICS

PRINCIPLES AND PRACTICE

THIRD EDITION

JOHN F. HUGHES · ANDRIES VAN DAM · MORGAN MCGUIRE
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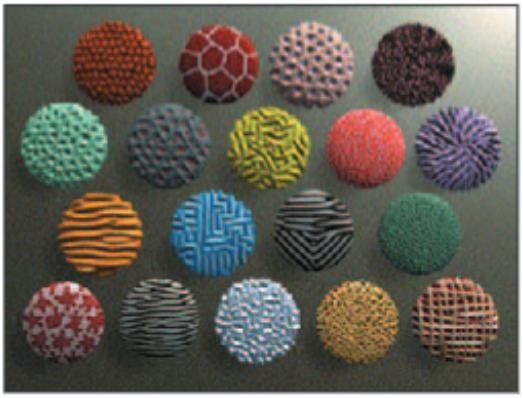

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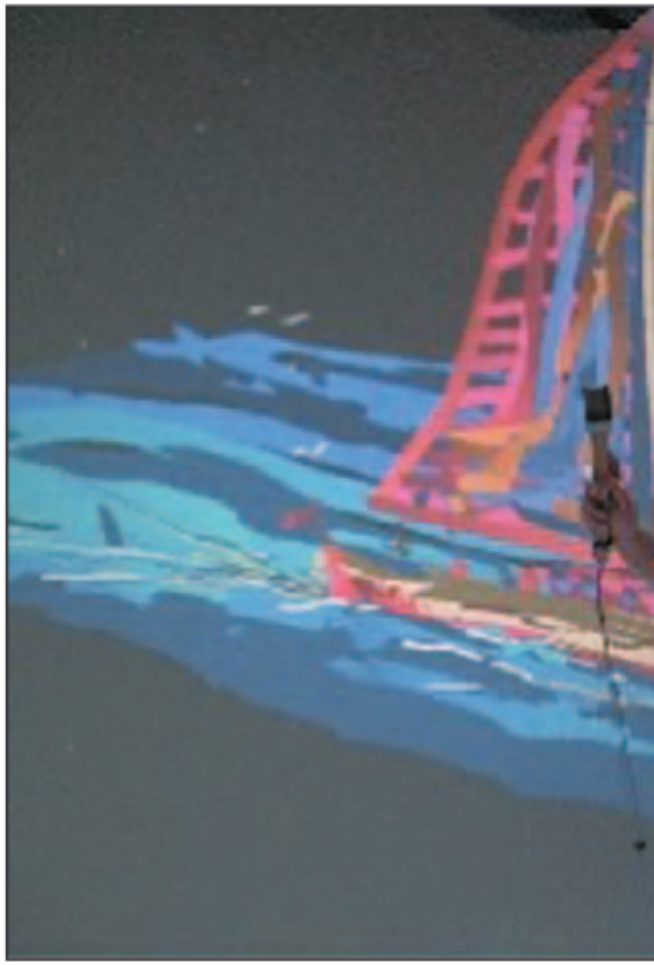

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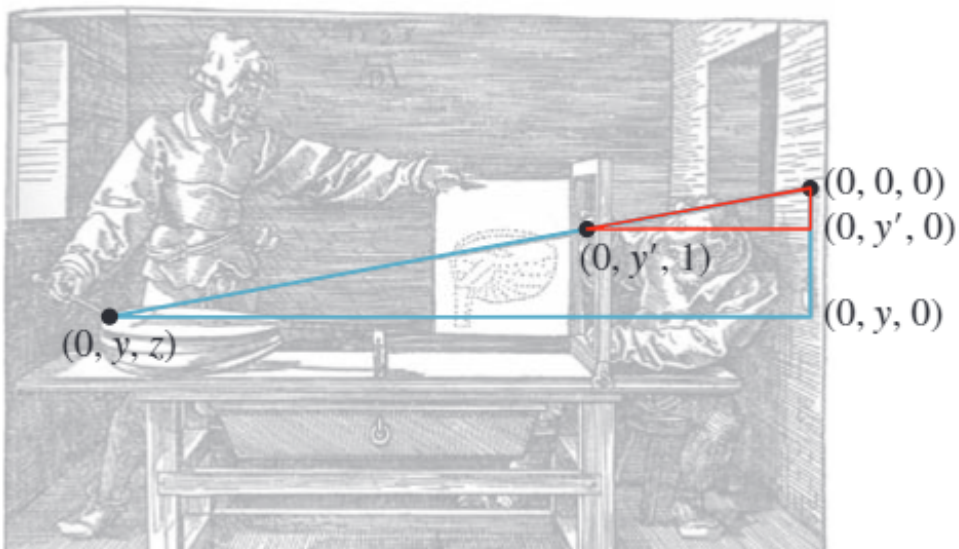

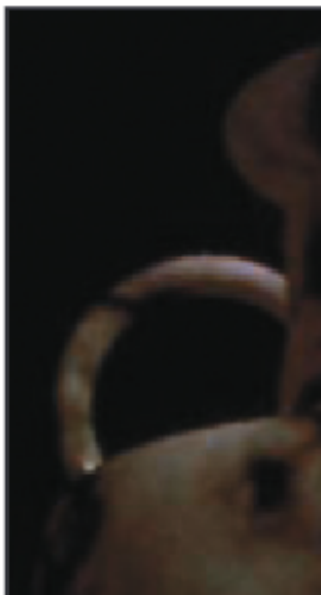

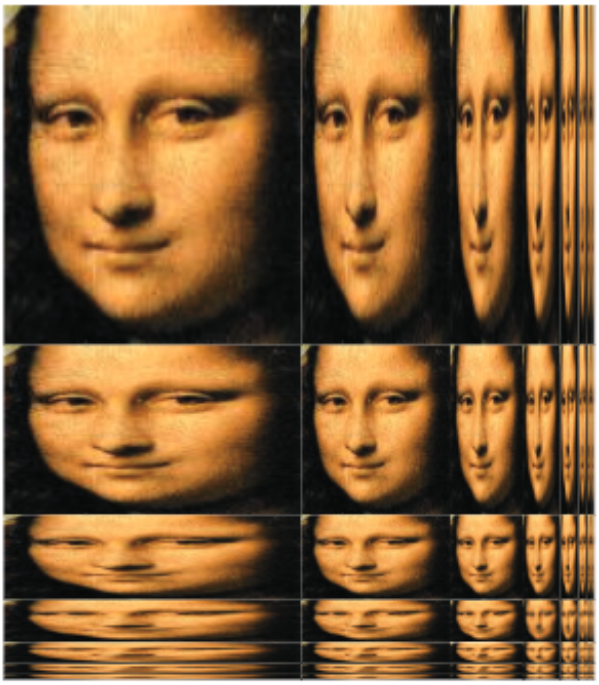

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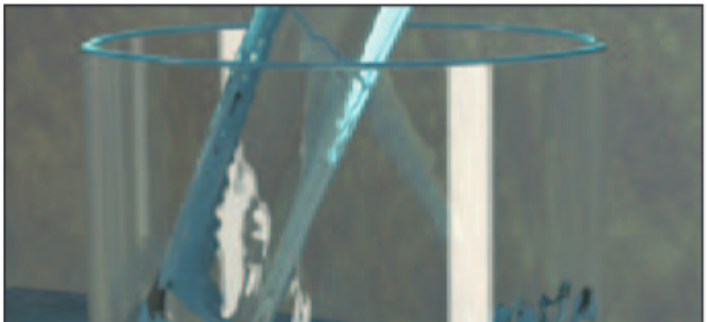

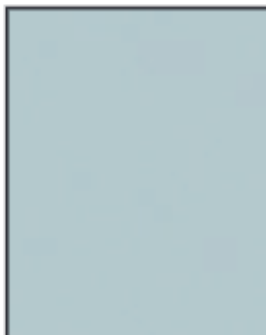

Computer Graphics

Third Edition

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Computer Graphics

Principles and Practice

Third Edition

JOHN F. HUGHES
ANDRIES VAN DAM
MORGAN MCGUIRE
DAVID F. SKLAR

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Library of Congress Cataloging-in-Publication Data

Hughes, John F., 1955–
Computer graphics : principles and practice / John F. Hughes, Andries van Dam, Morgan McGuire, David F. Sklar, James D. Foley, Steven K. Feiner, Kurt Akeley.—Third edition.

To my family, my teacher Rob Kirby, and my parents and Jim Arvo in memoriam.
—John F. Hughes

To my long-suffering wife, Debbie, who once again put up with never-ending work on "the book," and to my father, w was the real scientist in the family.
—Andries Van Dam

To Sarah, Sonya, Levi, and my parents for their constant support; and to my mentor Harold Stone for two decades of guidance through life in science.
—Morgan McGuire

To my parents in memoriam for their limitless sacrifices to give the educational opportunities they never enjoyed; and to my d wife Siew May for her unflinching forbearance with the hundred times I retreated to my "man cave" for Skype sessions with An
—David Sklar

To Marylou, Heather, Jenn, my parents in memoriam, and all

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