Geometric Modeling

Summer Semester 2010

Recommended Literature





Main Literature

(in the lecture's bookshelf, CS library)

Main Textbook: Splines & Co

Gerald Farin: Curves and Surfaces for Computer Aided Geometric Design (Fifth Edition)

Morgan Kaufmann 2002

Available in the lecture's bookshelf (CS library)

Differential Geometry

Alfred Gray: Modern Differential Geometry of Curves and Surfaces with Mathematica® (Second Edition)

CRC 1997

Available in the lecture's bookshelf (CS library)

Additional Literature

More on Rational Splines

Gerald Farin: NURBS – from Projective Geometry to Practical Use (Second Edition)

Morgan Kaufmann 1999

More details on rational curves & surfaces and projective geometry

More on Statistical Techniques

Richard O. Duda, Peter E. Hart, David G. Stork:

Pattern Classification (Second Edition)

Wiley & Sons 2000

Lots of material on least-squares techniques (and much more on statistical data processing)

Recap Math Topics

Recap: Linear Algebra, Analysis & Numerics

Refer to your lecture notes / standard math textbooks

More Literature

Further Literature: t.b.a.