



Računarska grafika

predavanja
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21. Primjene računarske grafike

- GIS
- OCR
- CAD
- CAE
- CAM
- Computer Vision
- 3D skeneri



GIS

- Geographical Information Systems
- Koristi i rasterske i vektorske podatke
- maps.google.com katastar.ba



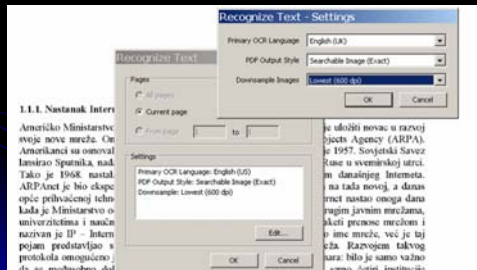
OCR

- *Optical Character Recognition*
- Koristi rastersku sliku
- Vrší vektorizaciju
- Upoređuje vektorske oblike sa slovima
- Vrší spell-check
- Snima rezultat kao tekst (txt, rtf, doc,...)



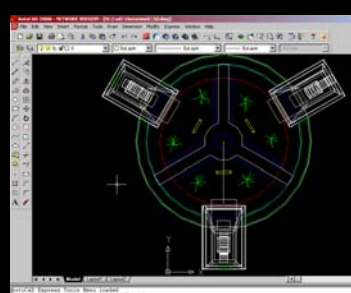
OCR

- Adobe Acrobat može izvršiti OCR iz PDF



CAD

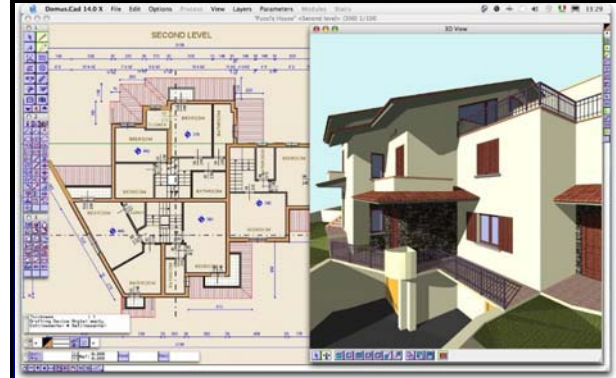
- Computer Aided Design
- Računarom podržano konstruiranje
- 2D drafting
izrada tehničkih crteža
- 3D modeliranje



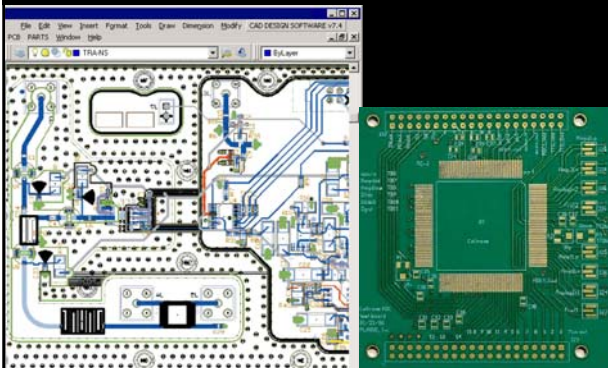
CAD

- Univerzalni alati (geometrija, kotiranje, šrafure, tekst, vrste linija)
- Specijalizirani softver (mašinstvo, građevinarstvo, arhitektura, elektrotehnika, hidraulika, štampane ploče, geodezija,...)
- 3D model služi kao osnova za CAE
- Od 3D modela se lako dobiju 2D presjeci i pogledi

CAD

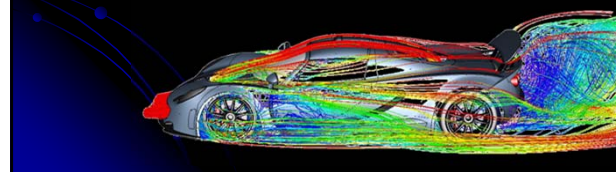


CAD

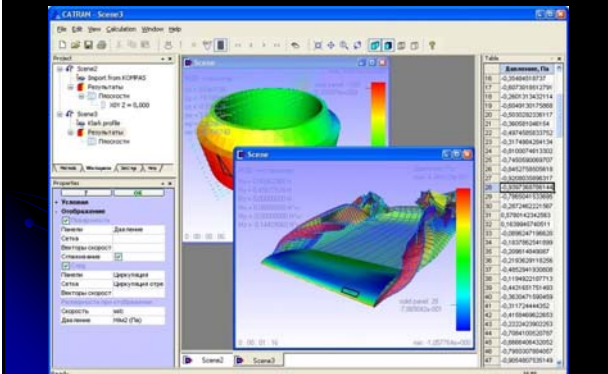


CAE

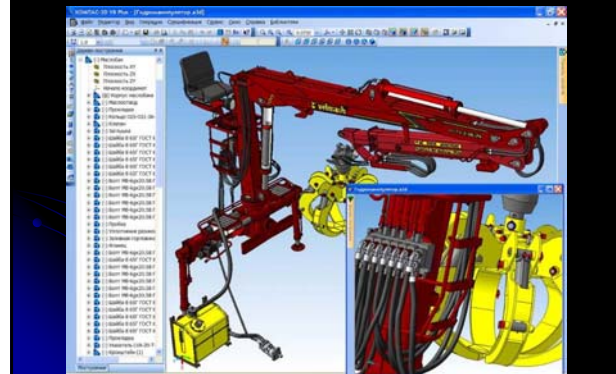
- Computer Aided Engineering
- Analiza i proračun CAD modela
- Metod konačnih elemenata
- CFD – Computational Fluid Dynamics



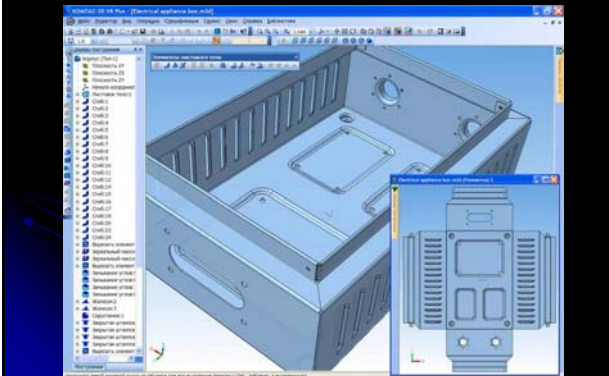
CAE



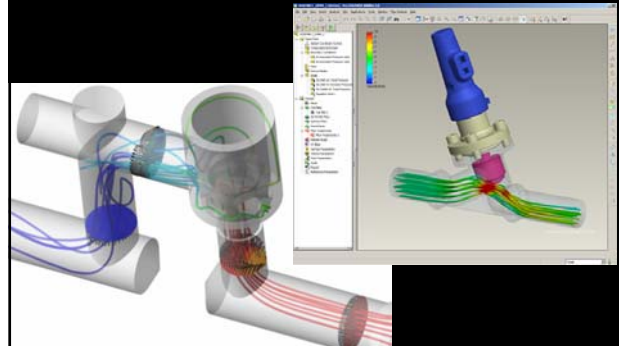
CAE



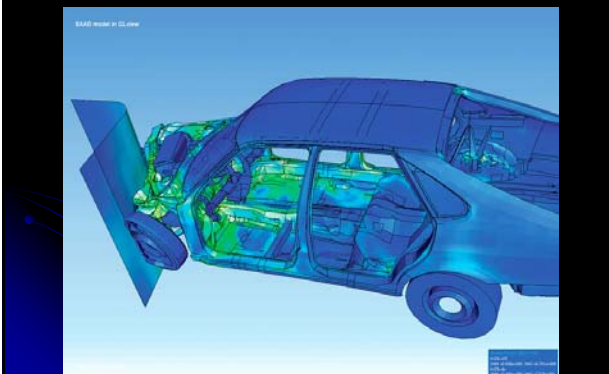
CAE



CAE

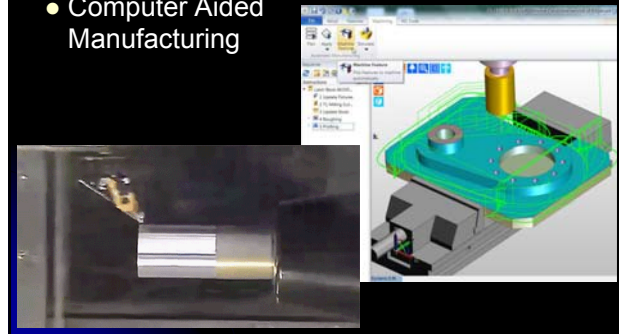


CAE



CAM

- Computer Aided Manufacturing



Computer Vision

- Mašine koje mogu da "vide"
 - Kontrola procesa (roboti, vozila bez vozača)
 - Nadgledanje
 - Prepoznavanje uzoraka (pattern recognition)
 - Indeksiranje baza podataka o slikama
 - Ispitivanje proizvoda
 - Medicinska grafika
 - Vještačka inteligencija



Computer Vision

