

# Computer graphics Applications

Jefwa ngombo nicholas

[ngombonj@gmail.com](mailto:ngombonj@gmail.com)

0722641884

# Computer graphic Applications

- - Geometry/drawing
    - Representation of solid and surface geometry of objects
    - Applied in areas that include engineering drawings, statistical and mathematical visualisation, cartography (maps), diagramming
  - Animation
    - Descriptions for surfaces that move or deform over time
    - Applied to characters animation
    - Physical animation e.g particle motion , rigid body motion
    - Virtual reality

# Computer graphic Application

- Rendering
  - Converts a model into an image on the screen
  - Photorealistic rendering
    - simulating light transport to get physically based realistic photo images
    - Applied in photography
  - Non photorealistic rendering
    - applying some kind of style
    - Applied in stylistic drawings

# Computer graphic Application

- Imaging
  - Image acquisition or image editing by scan systems
  - Application areas include medical scanning, document scanning

# Computer graphic application areas

- Computer Graphics has numerous applications, some of which are listed below:
- [?] **Computer graphics user interfaces** (GUIs) – A graphic, mouse-oriented paradigm which allows the user to interact with a computer.
- [?] **Business presentation graphics** - "A picture is worth a thousand words".
- [?] **Cartography** - Drawing maps.
- [?] **Weather Maps** – Real-time mapping, symbolic representations.
- [?] **Satellite Imaging** - Geodesic images.
- [?] **Photo Enhancement** - Sharpening blurred photos.
- [?] **Medical imaging** - MRIs, CAT scans, etc. - Non-invasive internal examination.

# Computer graphic application areas

- **Engineering drawings** - mechanical, electrical, civil, etc. - Replacing the blueprints of the past.
- **☐ Typography** - The use of character images in publishing - replacing the hard type of the past.
- **☐ Architecture** - Construction plans, exterior sketches - replacing the blueprints and hand drawings of the past.
- **☐ Art** - Computers provide a new medium for artists.
- **☐ Training** - Flight simulators, computer aided instruction, etc.
- **☐ Entertainment** - Movies and games.
- **☐ Simulation and modeling** - Replacing physical modeling and enactments