Visual Computing at Virginia Tech:

Status and Plan

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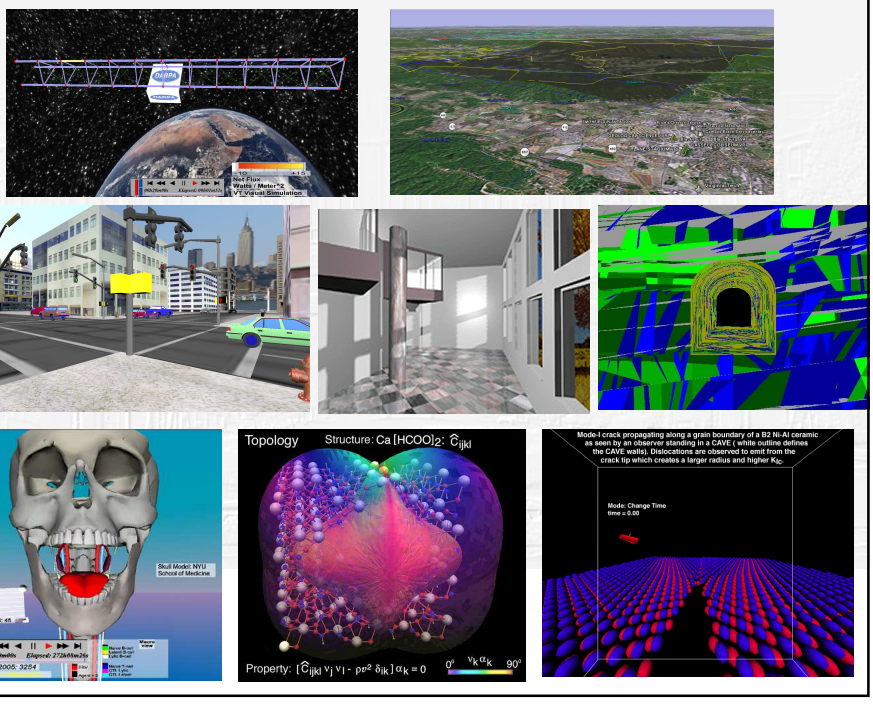
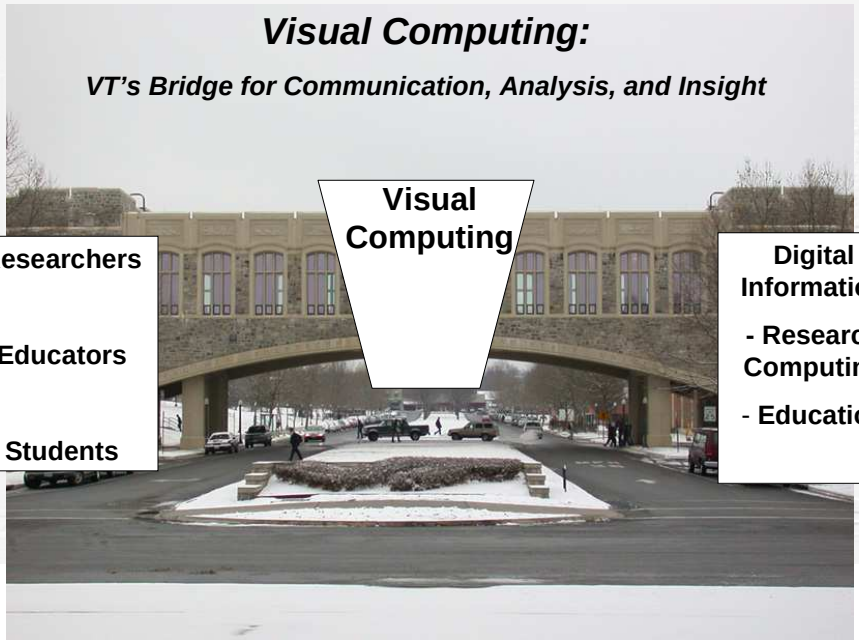
VT Research and Cluster Computing



Visual Computing:

VT's Bridge for Communication, Analysis, and Insight



Visual Computing

Researchers

Educators

Students

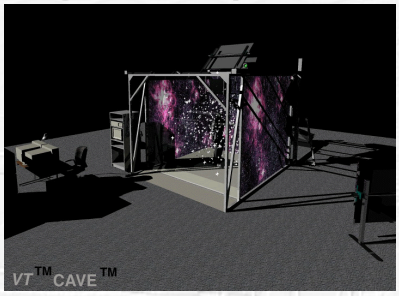
Digital Information

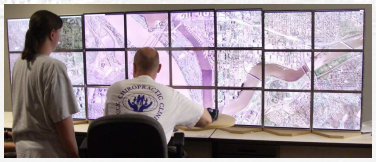
- Research Computing

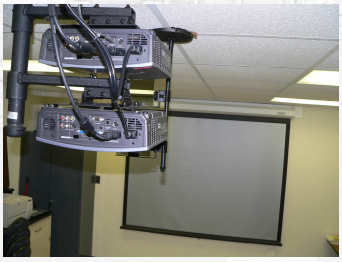
- Education

Visual Computing Group

- Facilities
  - Immersive CAVE
  - Stereo Walls
  - Gigapixel







Virginia Tech

Visual Computing Group

- Visual Analytics Tools
  - Cross-platform Software Framework
  - Data & Collaboration infrastructure
- Services
  - Education: FDI workshops, GEDI
  - Consultation
  - Application Development

Virginia Tech

Visual Computing Group

- Unifies and enables visualization activities on campus and other University sites (i.e. NCR)
- Serves the University's researchers and educators across:
  - Colleges & Departments
  - Institutes & Centers
  - Instructional Technologies
- Works closely with HPC to connect users and resources

Virginia Tech

Visual Computing Group

- Takes new technology and tools from CS and CHCI and deploys them for ‘production’ use
- Expands software frameworks to enable collaborative analysis and insight tools
- Works with International Standards groups to advance VT’s leadership in technology development

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Visual Computing Group

- Maintains state-of-the-art visualization facilities (CAVE, stereo wall, Gigapixel)
- Re-purposes hardware to establish visualization venues for colleges and departments
- Re-purposes hardware to provide visualization venues for instructional technology

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Strategic Plan

- Director and staff develop facilities, software, and services
- Open access for University community
- Work with domain researchers to:
  - develop grant proposals
  - develop domain-specific visualization tools

Virginia Tech

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Expand the existing infrastructures and allocate resources as follows:

- 60 % Research applications
- 30 % Educational applications
- 10 % Outreach applications

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Organization

- Director & staff
- Advisory Board : meets bi-monthly
- Stakeholders Group : meets semi-annually

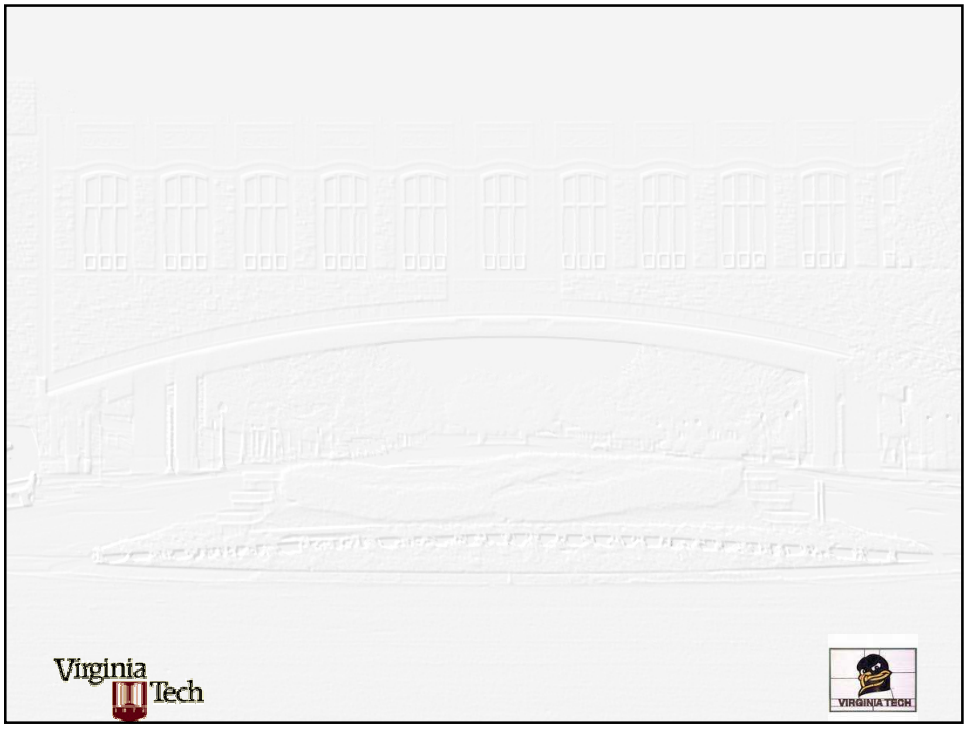
Virginia Tech

Visual Computing Group

Outlook

- Group will share office space the Center for eDesign and with faculty who would benefit from close proximity
- Staff
  - Director
  - Systems Engineer
  - VR programmer
  - Webservices programmer
  - Admin Assistant

Virginia Tech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