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 Group

- Facilities
  - Immersive CAVE
  - Stereo Walls
  - Gigapixel
Visual Computing Group

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

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
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

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

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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

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