

Courses / Projects

Current Projects

- VideoTAG - allows annotation of live video for later playback using the stylus on a Tablet PC. (3 person team, CS490T)
- Advanced Computer Graphics - projects include perspective-correct texture mapping, projective texture mapping, reflections through environment mapping (CS434)

Miscellaneous Previous Projects

- Internet telephone using TCP for directory information and UDP for voice data, with the ability to conference call (3 person team, CS434)
- VNCR - Virtual Network Computer Recorder - captures screen activity for later playback. (6 person team, CS490T)
- IRC-style chat client using sockets and Swing, programmed in java (CS180)
- Engineering Projects in Community Service - worked on a multidisciplinary team to develop web-based academic software. Used group development tools such as CVS and bug tracking. (12 person team, CS490D)

Compilers (CS384)

- Developed, in java 1.5, a "MiniJava" compiler
- Sequential steps used Visitor design pattern
- Generated PowerPC assembly code

Introduction to Computer Graphics (CS334)

- Developed a software wireframe renderer using a planar pinhole camera and shared vertex triangle meshes, implementing:
 - Gouraud and Phong shading
 - ray-traced reflections
 - later added hardware acceleration with OpenGL
- Developed an image-based renderer that draws a 3D scene from images with depth maps