CSE 598C: Meshing Techniques Dr. Suzanne M. Shontz The Pennsylvania State University

## **Final Project Description**

Students in CSE 598C: Meshing Techniques designed their own individual projects based on their research interests. Each student did the final project, gave a presentation to the class, and wrote a report on his/her findings.

## **Final Project Topics**

The following topics were investigated as final course projects.

Student	Area of Graduate Studies	Project Title or Topic
Joshua Booth	Computer Science and Engineering	Exploration of Element Shape
Jibum Kim	Computer Science and Engineering	The Effect of Anisotropy on Mesh Warping Problems
Abe Lee	Acoustics	Structured vs. Unstructured Meshes for Vortex- Shedding Simulations
Bahareh Nojabaei	Petroleum Engineering	Pressure Transient Testing for a Vertical Wall with a Longitudinal Fracture Using Unstructured Grid and Mesh Refinement
Nithiwhat Siripatrachai	Petroleum Engineering	Hybrid Dynamic Local Grid Refinement for Capturing Fronts in Gas Flooding
Brad Suchoski	Computer Science and Engineering	Hybrid Finite Difference and Finite Element Meshing Techniques for Solution of the Vector Wave Equation
Joshua Taylor	Bioengineering	Layer Addition to Meshes of a Formed Thrombus in a Backward-Facing Step
Junjie Yang	Petroleum Engineering	Application of Local Refinement in Triangular Mesh Systems for Fractured Hydrocarbon Reservoir