The above grant is to develop interactive material for MA 321 Geometric Modelling. The material to be developed includes a web-based text with java applets to learn about Bezier curves, B-Splines, Bezier patches, Coons patches, Catmull-Rom splines, and more. These methods are used extensively in computer graphics, geometric modeling (CAD/CAM), and imaging science. The grant will fund 3 students for six weeks during the summer to aid in the development of the course material.

Dates: Sunday, June 8 - Saturday, July 19, 2003
Stipend and support: $2400, room and board provided.
Application Due Date: March 22nd, 2003

Qualifications for Applicants:
Applicants should
- be current Rose-Hulman students,
- be committed to devote their full time to the program and not engage in any other course work or employment during the program,
- have a good background in Calculus and basic high school geometry
- have experience in using a high level mathematical package or programming language such as Maple, Mathematica, Matlab, C, Fortran, Pascal or Java.

In addition to meeting the above requirements, applicants will be judged on the basis of demonstrated competence in mathematics, their programming experience, motivation, work habits as well as one letter of reference.

A complete application will consists of:
- a completed application form
- a unofficial transcript including 2002-2003 Winter Quarter grades
- one recommendation letter, which should address most if not all of the following 
  (a) mathematical ability, (b) programming experience, (c) work habits, and 
  (d) ability to work in a team.
- a brief letter indicating why you want to participate in this program and how this program fits in your career plans, additional information may be added at your discretion (attach additional sheets as necessary to application form)
Application Form for Student Assistants
CCLI-EMD Grant: Motivating Geometry through Computation and Visualization

Name:______________________________________________________________

Citizenship: _____________ SSN ___________________ Birth Date ______________

Local Address ______________________________________ Home Address __________________________

________________________________________________________________________

Phone Numbers _______________________________________________________

E-Mail Addresses ______________________________________________________

________________________________________________________________________

Name of Reference (preferably a Mathematics or Computer Science Professor)
________________________________________________

Math Courses Taken (use numbers): _______________________________________

________________________________________________________________________

Computer Science Course Taken (use numbers): _____________________________

________________________________________________________________________

Other Relevant Courses Taken (use titles not numbers): _______________________

________________________________________________________________________

Programming Languages/Experience: _________________________________

________________________________________________________________________

Honors, Awards, Prizes, etc: _________________________________________

________________________________________________________________________

Signature: _______________________________ Date: ___________________________