Game and Simulated Environments Program

Overview, Status and Continuing Development
Game and Simulation as a Career

- Multi-billion-dollar industry
  - Compared to the film industry
  - Salaries competitive with other career paths
- Texas a major center of development
- Migration into and out of game industry
- Interdisciplinary development model
Undergraduate Curriculum

- Interdisciplinary Curriculum
- Specialization of the BSCS
  - Accredited BSCS degree
  - Fewer electives
  - Technical and non-technical coursework to support the specialization
- Non-technical Courses
  - Four courses from Film and Digital Media, one each year
  - Calculus-based physics (4th and 5th semester)
  - Cooperation with other academic units
Undergraduate Curriculum

- Most courses from the BSCS sequence
- Specialized Courses in Computer Science
  - Computer Graphics (6th semester)
  - Game/Simulation Frameworks (7th semester)
  - Game/Simulation Capstone (8th semester)
Program Visibility

- Engagement with gaming industry in Texas
- Recognized as a top program
Student Interest

- About 80 percent of new freshmen interested in this program
- Almost half of new CS freshmen pursuing the track
- Interest meetings have attracted more than 50 students
Maintaining Student Interest

- Five semesters before specialized computing courses
- Challenging curriculum
- Need to keep students engaged
  - Keep them in the major
  - Raise the visibility/priority of the program
  - Continue to attract new students
Extracurricular Support

- Enhance program with activities outside the curriculum
  - Expose students to advanced/specialized material early
  - Engage students from other academic programs
  - Maintain and build industry connections

- Game Nights

- Student organization
Extracurricular Support

- Game Development
  - Exposure to game development software
  - Engage students at all levels of expertise
  - Enable interdisciplinary teams
  - Permit students to present and review work in progress
Game Development Lab
Game Development Meeting
University Support

- Small game development lab
  - Second-hand equipment from the department
  - Equipment on loan from other departments
- Strategic Plan Approval
- Possibility of a new tenure-track hire
- Volunteer faculty support
Support Needs and Efforts

- Development lab
  - Development systems
  - Supporting Software
  - Presentation Equipment

- Lecturer faculty position
Support Needs and Efforts

- Game club membership
- Software support
  - Free engine and modeling software
  - Emergent Gamebryo
  - Valve Cyber Café
- Cooperation with local retailers
- Keck grant proposal
- University capital campaign