

# Gaming In Georgia

The Georgia General Assembly has recognized the future potential of the computer gaming industry and recently passed House Bill 1100, the 2008 Entertainment Industry Investment Act. This bill is designed to encourage the growth of the film, video, and digital productions, and according to Bill Thompson, deputy commissioner of the Film, Music and Digital Entertainment Office, a division of the Georgia Department of Economic Development:

We expect a significant increase in film and television projects, and Georgia will be the most competitive state in the country for video game productions. Georgia is one of the few states whose entertainment incentives support the video game industry.

In 2006, film, television and video game companies contributed \$475 million to the economy of Georgia; this is up from \$124 million in 2004. The total economic impact of entertainment productions from 2005 through 2007 exceeds \$1.17 billion. [1] Graduates of the Game Design and Development degree at SPSU will be well positioned to enter this growing field and support the local Georgia economy as well as find employment elsewhere in the nation.

## Revitalizing Computing Education

However, while the computer gaming and related industries are likely to continue to see significant growth, the United States has faced significant difficulties in meeting the employment needs of the industry. John F. Sargent, Senior Policy Analyst with the Office of Technology Policy, Technology Administration of the U.S. Department of Commerce projects that there will be over 140,000 new job openings for 2012 in computing. But in that time, less than 60,000 U.S. degrees will be produced in computing. [2] With more recent Bureau of Labor Statistics data allowing for a 10% adjustment from 2002 to 2006, a conservative estimate still projects a shortage of over 60,000 degrees awarded. This proposed program addresses this projected shortage of graduates in the computing field.

One of the reasons for the declining interest in degree programs in computing may be a series of misconceptions about outsourcing and globalization and their impact on computing careers. However, as Eric Roberts, principal author of the computer science volume of the ACM-IEEE Task Force on Computing Curricula 2001, states:

As long as qualified candidates are scarce and capital is plentiful, companies will hire anyone for whom the marginal value exceeds the marginal cost. The value that a company can recognize from the services of talented software developers vastly exceeds their costs, irrespective of in which country they reside or in what currency they are paid. The only way software development jobs will move entirely overseas is if the U.S. abandons the playing field by failing to produce students with the necessary skills. [3]

Nevertheless, outsourcing is a reality and the program will pay particular attention to instilling those skills in its graduates that are less likely to be outsourced. Thus, while modeling and the

more artistic aspects of game design is often outsourced and done outside of the U.S., this program focuses on the design and programming of games and interactive media. According to Clinton Lowe, the President of the Georgia Game Developers Association, our program focuses on those aspects of game development that are less often outsourced and tend to stay in the U.S.

## **Competitive and Lucrative**

The shortage of qualified game designers and developers is reflected in the salaries within the industry. According to the 7th annual Game Developer magazine Salary Survey, the average American game industry salary in 2007 was \$73,600, up from \$73,316 in 2006. Game programmers earned an average of \$83,383, game designers earned an average of \$63,649, and workers in the area of business and marketing earned an average of \$101,848.

Further, Georgia was ranked as the state with the 6th highest average salary across all game developer disciplines, indicating game development is a profitable career choice for students in the state of Georgia.

"When we compared level of education with average salary there was a clear correlation between holding a bachelor's or graduate degree and earning a higher salary." [4]

With regard to gender issues in computing, it is interesting to note that the 7th Annual Salary Survey by Game Developer Magazine also found that female online game community managers were paid 15% higher salaries than their male counterparts, demonstrating that this subsection of the gaming industry demonstrates positive appeal to female student majors.

Finally, Douglas Thomas and John Brown argue that gamers have a competitive edge and are well adapted to succeed in the 21st century workplace; they argue that gamers possess a number of attributes that make them more competitive in the workplace, including being bottom-line oriented, understanding the power of diversity, thriving on change, viewing learning as fun, and being able to explore radical alternatives and innovative strategies for completing tasks. [5] These findings are corroborated a 2007 study by the IBM Institute for Business Value. [6]

## References

- [1] Georgia Boosts Incentives for Entertainment Industry, from the Office of the Governor, Monday, May 12, 2008.
- [2] National Science Foundation/Division of Science Resources Statistics; degree data from Department of Education/National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey; and NSF/SRS: Survey of Earned Doctorates; Projected Annual Average Job Openings derived from Department of Commerce (Office of Technology Policy) analysis of Bureau of Labor Statistics 2002-2012.
- [3] Andriole, S. and Roberts, E., Technology Curriculum for the Early 21st Century, CACM, vol 51, no 7, 7/08, p27-32.
- [4] 7th Annual Salary Survey, Game Developer Magazine, April, 2008, p7-14.
- [5] Brown, J. S. and Thomas, D., The Gamer Disposition, Harvard Business Review, February 14, 2008.
- [6] DeMarco, M., Lesser, E. and O'Driscoll, T., Leadership in a distributed world: Lessons from online gaming, IBM Institute for Business Value, June 12, 2007.