

Computer Science Department

Annual Report for 2006–2007

Summary

We started out the academic year by welcoming a new assistant professor, Brian Ladd, to our faculty ranks. Brian was chosen from among a pool of over 140 applicants for our advertised position. He has a particular interest in computer games, from both teaching and research points of view.

Computer Science programs nationwide have experienced steep declines in CS enrollments in the early to mid 2000s following the “dot-com bubble burst”. Despite this, the CIS major at SUNY Potsdam has sustained its enrollment levels in the past few years and shows some promise of increasing these levels in the near future. We expect to continue to adjust our curriculum and course offerings as we seek to attract new students into the major.

The activities summarized below show that the faculty and staff of the Computer Science Department continue their significant involvement in the academic life of the College and in the Computer Science Profession.

Faculty and staff

- Timothy Fossum, Ph.D., Professor and Chair
- Charles Marshall, Ph.D.
- Susan Haller, Ph.D., Associate Professor
- Brian Ladd, Ph.D., Assistant Professor
- Faye Simmons, Adjunct Faculty
- Diane Billings, Secretary

Highlights

(These items are listed in no particular order.)

- Drs. Fossum and Haller jump-started the campaign to establish an endowment for a merit-based CIS Alumni Scholarship. The first scholarship will be awarded in the 2007–2008 academic year. The long-term goal of the campaign is an endowment of \$80,000.

- CIS majors participated in several internships (credit and non-credit) during the academic year, at the following locations:
 - Northeast Analytical
 - Hyplex, Inc.
 - NASA (Florida)
 - General Electric
 - IBM
 - Potsdam CTS

The Northeast Analytical and Hyplex internships were *virtual*, meaning that students could continue their residence at SUNY Potsdam while working on their internship projects remotely.

The NASA internship was highly competitive. Our Potsdam intern, Jamie Szafran, was one of 20 selected from a pool of over 1000 applicants nationwide.

- We designed and inaugurated the “Go FIGure” Freshman Interest Group – in collaboration with the Departments of Mathematics and Sociology – with the first offering to be in Fall 2007.
- We offered CIS 105 – Introduction to Computing – in a Distance Learning format for the first time. We expect to continue this on a regular basis for Winterim, Spring, and Summer sessions.
- We constructed a high-performance Blade Center cluster using state-of-the-art equipment donated through an IBM matching grant. We plan to use this cluster for student projects and to carry out simulations to attract students to our program.
- We have initiated a collaboration with the Department of Information and Communication Technology to design and offer courses relating to e-commerce, which can lead to a graduate degree as an Information Technology Specialist. We believe that this degree offering may be of particular interest to North Country residents who can use high-speed Internet resources to work on e-commerce related projects remotely.
- We established the North Country Programming Contest. SUNY Plattsburgh hosted the inaugural contest in Fall 2006, and we hosted the contest in Spring 2007. We expect to continue this as a semi-annual event, giving our students practice in preparation for competition in regional and national contests. Clarkson University has agreed to host the Fall 2007 contest.

We also sent student teams to participate in the ACM International Computer Programming Contest preliminaries in Oswego, and the CCSC-NE regional contest at Rochester Institute of Technology.

- Susan Haller served as conference co-chair for the international SIGCSE Conference held in the Cincinnati, Ohio metropolitan area in March, 2007. This is the premier annual international conference of CS educators. The conference set an attendance record of over 1300.
- Timothy Fossum served as tutorials/workshops/panels co-chair for the regional CCSC-NE conference held at RIT in April, 2007. He and Lonnie Fairchild were selected as conference co-chairs for the 2009 conference to be held in Plattsburgh.
- The ACM Student Chapter continued its activities during the academic year with a core group of dedicated officers and meeting attendees. They co-sponsored, with ICT, the highly successful *Game Night* on March 21st.
- Susan Haller continues to serve as Secretary of the Florida Artificial Intelligence Research Symposium, which held its annual meeting in Key West in May, 2007. Dr. Haller will serve as conference chair for the 2009 Symposium to be held on Sanibel Island.

Scholarly Activity – Refereed Publications

“Integrating low-cost robots into Pyro” by Timothy Fossum and James Snow was presented at the *2207 AAAI Spring Symposium Workshop on Robots and Robot Venues: Resources for AI Education* in Palo Alto, California, March 2007. James Snow is an undergraduate who worked with Dr. Fossum in Summer 2006 on a robot project, from which this research was derived.

“Teacher responses to student gender differences” by Martha Voyles, Susan Haller, and Timothy Fossum was presented at the *Proceedings of the 12th Annual SIGCSE Conference on Innovation and Technology in Computer Science Education* in Dundee, Scotland, June 2007. Dr. Martha Voyles is a researcher in science education at Grinnell College. This paper is based on the research reported in the journal article described next.

“Teachers respond functionally to student gender differences in a technology course” by Martha Voyles, Timothy Fossum, and Susan Haller has been accepted for publication in the *Journal of Research in Science Teaching*.

“Gender differences and intra-gender differences in computer science students: Are females CS majors more similar to male CS majors or female non-majors?” by Sylvia Beyer and Susan Haller was published in the *Journal of Women and Minorities in Science and Engineering*.

“XYZZY: Finding New Magic in Text Adventure Games” by Brian Ladd was presented at the *2nd Annual Microsoft Academic Days on Game Development in Computer Science Education* aboard the Disney Cruise Ship in February, 2007.

University service

- Susan Haller chaired the Admissions Committee
- Timothy Fossum was elected for a two-year term as SUNY Potsdam Faculty Senate vice chair
- Susan Haller was elected as an alternate senator to the SUNY Faculty Senate
- Timothy Fossum served on the Arts and Sciences Curriculum Committee
- Timothy Fossum served as the appointed representative of the School of Arts and Sciences to the Teaching and Learning Technology Roundtable (TLTR)
- Brian Ladd and Charles Marshall served as CS Department representatives to the SUNY Potsdam Faculty Senate