The fall semester at Wittenberg has been a very busy one for us in the Department. After saying good-bye to Jim Noyes as a retiring Professor of Computer Science, we welcomed Steven Bogaerts (Indiana University) as a new Assistant Professor of Computer Science. Because Professor Nancy Saks was on sabbatical leave, Steve and I had our hands full teaching the computer science courses needed to keep our program growing. Since one of Steve's areas of expertise is Artificial Intelligence, he got to teach our Comp 350: Artificial Intelligence course this fall.

In addition Wittenberg hosted the Fall Meeting of the Ohio Section of the Mathematical Association of America (MAA). During the last weekend of October approximately 100 mathematicians, faculty and students, from the state of Ohio converged in Barbara Deer Kuss Science Center for the event. Due to the careful and exhaustive planning made by the all the members of the department (especially Sharon Shambaugh, our Administrative Assistant, who seems to have limitless energy and an eye for details) the two-day event went off without a hitch (except for the fact that the banquet was almost an hour late in starting – but that's a story for another time). It was particularly appropriate that Wittenberg should host the meeting since Professor Bill Hm0

Last semester, the department was saddened to announce the retirement of Jim Noyes after 22 years of teaching at Wittenberg. However, they are thrilled to announce Jim's replacement is Steven Bogaerts, a new Ph.D. in Computer Science from Indiana University who joined us in August as an Assistant Professor of Computer Science.

Steve began undergraduate studies at Rose-Hulman Institute of Technology in 1996, double majoring in computer science and math, with a minor in Spanish. As an undergraduate he attended an REU at University of Alabama in Tuscaloosa, where he studied design patterns. He also spent two summers as an intern at Southwest Research Institute (SwRI) in San Antonio, TX, working primarily in the development of a traffic management system. Steve earned his B.S. from Rose-Hulman in 2000.

He then began graduate studies in computer science at Indiana University (IU), earning an M.S. in 2002 and a Ph.D. in 2007. As a graduate student, he taught an introductory programming course and an artificial in

Computational Science: A Bright Light—By Dr. Eric Stahlberg

A question that arises frequently in discussions around computational science is that of 'How can I *do* computational science if I can't program a computer?' The answer to that question is one that truly illustrates the power of computational science, and the reason for the growing demand for individuals skilled in using computers to solve problems.

Computational science is an integrated discipline, a team effort, joining the skills of the mathematician, the computer scientist, the programmer, and the individual seeking a solution to a challenging problem. In the case of computational science, the computer becomes a means to explore and understand more about the challenge, investigating the possible solutions. As a team effort, one individual need not be an expert in programming the computer to use and be successful in computational science; one need only be open to learning new technologies and willing to work in a team.

The experiences of Wittenberg's interns from the past summer really bring this point home. Majors from biology, biochemistry/molecular biology, chemistry, physics and computer science all enjoyed and benefited from their experiences in developing approaches to more effectively identify new drugs to treat diseases, using virtual microscopy to help diagnose cancer, examining methods for getting an accurate picture of observed interactions at a molecular level, looking at new materials with potential to impact vehicles of tomorrow, and exploring techniques to visualize complex and interacting systems. Some of the experiences involved programming directly though many did not. The common thread uniting these experiences in computational science was the willingness to use computer technologies, learn more about using computers to solve problems, and work as a team to make progress in addressing some incredible challenges.

Of course, the significance of computer programming is still very important to computational science. Programming the computer can take many forms, ranging from prototypes created with Mathematica, Python or VTK (a visualization toolkit), to taking advantage of another's efforts through applying specific programs like ArcGIS, Spartan, GROMACS, and even Microsoft Excel. It is through the talents and efforts of the software engineer that reliable programs are developed that enable the team to make progress in addressing their challenges.

So why is there continued optimism for computational science? There will be no shortage of challenges in need of solution within the foreseeable future. In fact, the opportunity for innovative solutions is expected to grow greatly as computers are increasingly relied upon as affordable research and development tools. Individuals with experience in computational science are increasingly sought as much for their well-rounded team skills as for their technical abilities. On campus, investments in computational science are continuing, building ever more interesting opportunities for Wittenberg students. Stay alert to opportunities for many exciting internship and research opportunities in the coming months. The future for computational science is growing increasingly bright indeed!

In the Spotlight (cont).

material to incorporate into his classes, and values the opportunity to interact with the students. When asked about his experience at Wittenberg so far, he said, "I am thankful and excited to be a part of the Math and Computer Science Department at Wittenberg, and am looking forward to the future."

The computer science majors are especially excited to have a new face and a fresh outlook in the department. When asked, Nick Kovach '08 said, "It is great to have Dr. Bogaerts at Witt and I was really excited to have a class with him this semester. The material is hard, but he has a knack of simplifying concepts and really listening to student input." Jason Evans '10 echoes this sentiment: "He simplifies the learning process and interacts with the class really well. As a .858 0 Td (e)Tj 4.44858 0 Td (p)Tj 5.04973 0 Td (t)Tj 2.76 0 Td (m)Tj 7.5746 0 Td (p)Tj 5.049

FALL MEETING OF THE OHIO MAA HELD AT WITTENBERG

The department was very happy to host the Fall 2007 meeting of the Ohio Section of the Mathematical Association of America (MAA) on October 26-27.

The MAA is one of the professional societies for college math teachers and anyone else with an interest in mathematics. In fact, many of our students are member
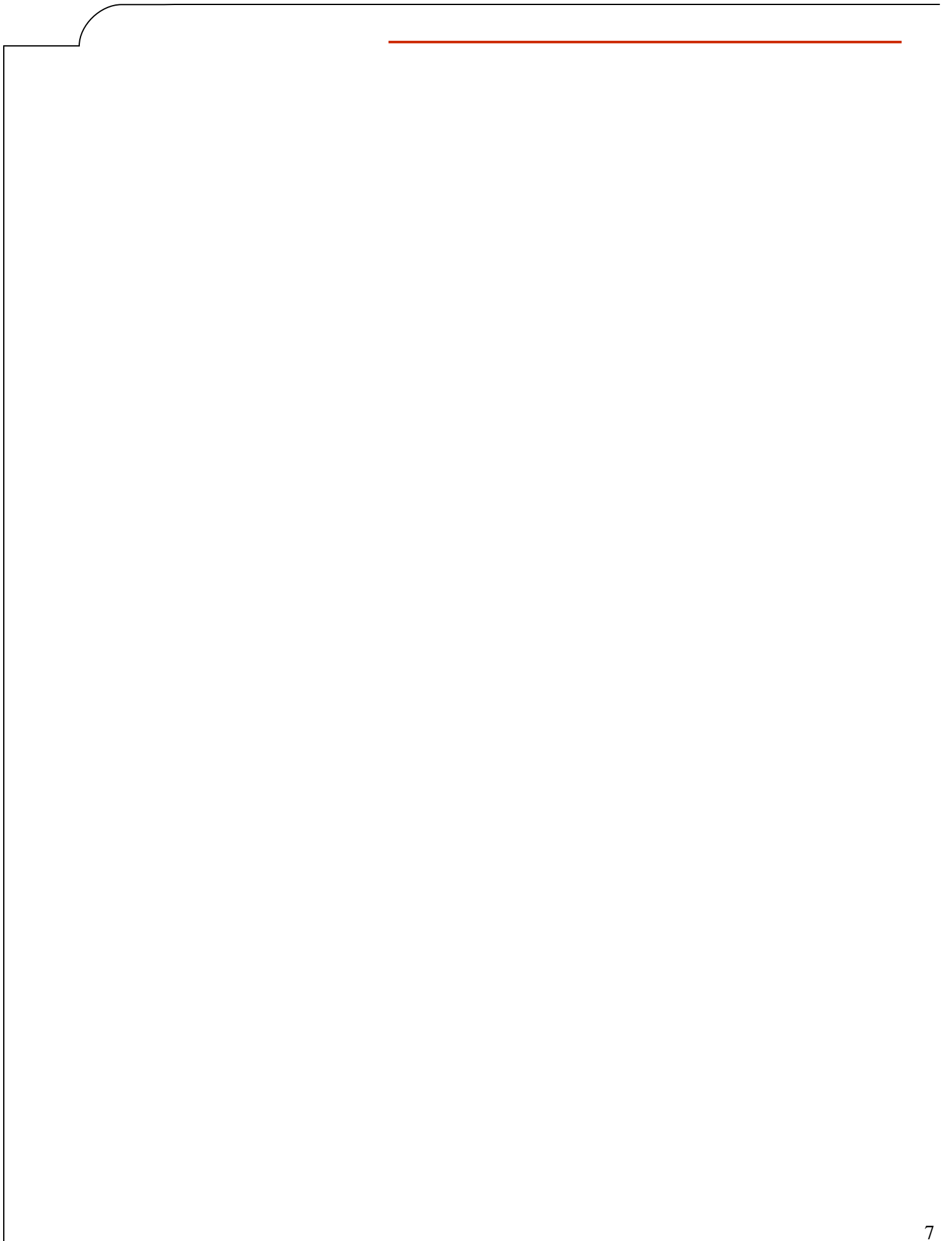
98) and got married in January 2003. After finishing my MSW, I took a job as a school social worker and ended up teaching junior high math!" She and Jason have two kids now: Jack and Ben. "I'm also a webmaster for a local soccer league (www.azwomenssoccer.org) and I tutor some of my former students in Algebra and trig so the math is still in me!... And I'm still playing soccer, too."

Jonathan Morgan '98 (comp) is now "an instructor at Michigan State's school of journalism now (as well as the Multiplatform Editor for the Detroit News)."

Randy Tobias '98 (math) is now in his fifth year of teaching at Keystone Oaks High School in teh Pittsburgh area. In addition to teaching AP Calculus and the Honors Precalculus classes, "I am running the Math Club at the high school and am the MATH-COUNTS coach for the middle school. Last year, I

If you would like to