

## ■ Michael Wells, professor of information systems & technology

You are director of two university-industry partnerships with Brown Printing Company (BPC) in Waseca and with Maverick Software Consulting (MSC) and Thomson Reuters (formerly West Publishing) in the Twin Cities. Tell us how Brown Technology Campus Cooperative (BTCC) and Project Maverick work.

These companies have been longstanding recruiters and advocates for the Information Systems & Technology department at MSU. Both projects allow students to work on real world technology-based projects under the guidance of full-time employees. Students work a minimum of one year and continue until they graduate. Students' work schedules are flexible, and school is still their highest priority. The BTCC employs one to three students, is in a faculty office on MSU's campus, and students work directly with BPC's IT staff to complete projects. Project Maverick employs 20-30 students and has office space conveniently located in University Square. They act as an onshore outsourcing agent for Thomson Reuters, much like Thomson uses outsourcing vendors overseas.

### Do many of the students get full-time jobs with Brown or Thomson?

Thomson Reuters has hired 17 students from Project Maverick. BPC has not hired any from the BTCC yet, but approximately 50 percent of their IT staff is MSU alumni.

### What is the financial agreement with the companies you have programs with?

The industry partners shoulder the vast majority of the expenses for these agreements. In February 2009, BPC signed their second three-year contract committing over \$200,000 to the program. In August, MSC signed a five-year contract committing in excess of \$3 million to Project Maverick. Indirect cost recovery for MSU from these projects will be well over \$200,000. These monies are distributed across MSU to fund additional research projects, purchase new equipment, provide student scholarships, etc. In addition to funding these projects, the partners provide scholarships for IS&T students.

### What are the major benefits of these projects?

The students are the major benefactors. They gain real world experience, earn enough money to cover room, board and tuition — all while going to school. Graduates of these projects are some of the most sought after on campus. MSU benefits by cultivating partnerships with industry participants and through indirect cost recovery. Faculty benefit by keeping up-to-date on industry practices and publishing research articles. The industry partners and their clients benefit by utilizing a low cost, technologically savvy pool of potential full-time employees.

### You do some research related to these projects. Tell us about what you have found.

The student interns at MSU compare very favorably in terms of productivity when compared to both offshore outsourcing resources and



### ■ Background:

12th year at MSU;  
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B.S. in computer  
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M.S., software design  
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His father was an MSU  
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professional developers. All three of these groups excel at different types of software development and software testing tasks. However, from a pure cost analysis, student interns are an extremely valuable pool of low cost, highly skilled resources for BPC and Thomson Reuters and outperform both offshore outsourcers and professional developers on many task types.

### With technology changing so fast, how do you prepare students in computer-related fields at MSU so they can keep up once they graduate?

MSU's IS&T Department has a long history of preparing students to "go to work." Updating curriculum and technologies used in class is an ongoing process for information systems and information technology majors. Within the last two years, a revised curriculum has increased speech and English requirements, and required new coursework in security, human-computer interaction and software testing. These majors have built on a long-standing emphasis on the principles of programming, systems analysis and database design. The information systems major combines that technology coursework with additional requirements focusing on business principles taught in courses such as finance, accounting and management. Learning new concepts and technologies is an ongoing part of students' experience.

### What are the most common jobs graduates will get into? Are there emerging jobs in the industry that will be hot in coming years?

Most graduates enter the workforce as programmers, system analysts, software engineers or software testers. All of these jobs should be hot areas for the foreseeable future. Since 9/11, security has become an important aspect of all computer-related entry level positions.

### Do most grads get a job? What salary range do many of the grads start at?

100 percent of students who have worked on Project Maverick or the BTCC have received full-time positions in their fields. Typical starting salaries in Minnesota are \$55,000-\$60,000. **MV**