

08/30/12 - Londonderry College Student Creates Database Solution for the YWCA



The YWCA had a problem. And it turns out the solution will help dozens of UNH Manchester students learn new skills and has kick-started at least one young man's career in software development.

David Meehan, of Londonderry, NH, is a B.S. Computer Information Systems junior at UNH Manchester. This summer, he helped perfect a project started by students in the computing technology program and aimed at helping the YWCA in Manchester process donations coming into the non-profit. Meehan, by winning the 2012 John G. Winant Fellowship awarded by UNH's Carsey Institute, was able to take a summer internship at the YWCA Manchester where he is implementing the project.



"There's a lot of stuff that you experience in the course, that when you do it for real is really different," said Meehan. "It actually means a lot. ...Software development is something that I am interested in pursuing as a career, so to have this first-hand experience with it is absolutely terrific." Computer Information Systems as a degree program encompasses all aspects of computing technology with the goal of putting students to work with companies and organizations in the community to solve real-world problems while at the same time learning computer skills.

"Our courses are project-based," said Computing Technology Coordinator and Associate Professor Mihaela Sabin. "To make the learning experience relevant, we are interested in real world projects with real stakeholders, clients, and end users."

The key curricular components of the B.S. CIS program include programming, networking, human-computer interaction, databases, web systems, and IT fundamentals. Outside of the classroom, Sabin has fostered ties to local business and industry, including start-ups, non-profits, and government agencies. These partnerships translate into hands-on, practical and authentic experiences through course projects, internships, independent study projects, and undergraduate research fellowships and scholarships.

"The students have the experience of knowing what the purpose of the project is, the profile of the organization using the project, and the features of the system under development that are of interest to the client and end-users," Sabin said. "And they go through the process of specifying, designing, implementing, deploying, and documenting systems they create based on real user needs and requirements."

Enter the YWCA. Cathy Gagne, director of operations and administration with the YWCA in Manchester explained that the YWCA approached UNH Manchester three years ago for help finding a way to track donations and donors. Gagne said at the time, and even still, they were using spreadsheets. But the only way to look at trends or search that list of donors was to painstakingly go through each of the spreadsheets and manually do the calculations. Without a huge staff, an IT department, or even a person on staff who knew how to fix the problem, this was not a practical way to go about things.

Sabin's class started tackling the problem. Every semester, new minds addressed the issue, tweaking parts of a web application based on Gagne's instructions and needs. In Spring 2012, the class got the concept to prototype. With Meehan's fellowship in hand, it became his job to see the prototype through to implementation over the summer.

The actual process was tricky, Meehan said, since he had no experience at first with evaluating cloud services for the system deployment and operation. But with Sabin's help and the assistance of a volunteer IT Team at the YWCA, not only did he acquire those skills, but Meehan said they are hoping to have the application up and running by the end of summer 2012.

"It makes a huge difference to for us," said Gagne. "We've had significant funding cuts over the past few years and we don't have the funds to do something like this ourselves. This project helps us move forward."

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