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Class of '97

IWU Math-Computer Science Major Lands Summer Job At Argonne National Laboratory in Suburban Chicago

BLOOMINGTON, Ill.--Meta Voelker, a senior majoring in mathematics and computer science, will receive her bachelor's degree from Illinois Wesleyan University on May 4. Three weeks later, she'll begin work at one of the federal Energy Department's largest laboratories, a place where 1,750 scientists and engineers--775 of whom hold doctorates--are working on more than 200 research projects.

Voelker has won a summer appointment at Argonne National Laboratory, a $480 million-a-year operation, located in suburban Chicago. Argonne's research agenda includes everything from meltdown proof nuclear reactors, advanced batteries and fuel cells, and superconductors, to the cause and cure of cancer and advanced computer research. Argonne is operated by the University of Chicago for the U.S. Department of Energy.

Voelker, who will work at Argonne from May 27-Aug. 8, drew an assignment in the laboratory's Mathematics and Computer Science Division. She'll be working on cutting-edge mathematics dubbed MIZAR, a Polish development, and Otter, an automated deduction system devised at Argonne.

"I won the appointment," Voelker said, "based on the classes I took at IWU, my previous research experience, and recommendations from my professors.

"Working at Argonne," she added, "is a good way for me to transition out of college. It also will give me the opportunity to see research in math and computer science from a different standpoint."

Voelker said: "I'm very excited about working at Argonne and I'm looking forward to going there and having a great experience."

After wrapping up her work at Argonne, Voelker is headed to the University of Wisconsin-Madison, where she will begin graduate school, working on a master's degree in mathematics as a first step toward a doctorate.

"What interests me about math," Voelker said, "is that it's so widely used--there are applications of mathematics in almost any field. I really enjoy the formality of

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mathematically proving something--to say it works. It's much stricter than just observing something."

Voelker double majored in computer science at IWU because "computer science gives me the ability to do things in mathematics I couldn't do without computers."

As an IWU undergraduate, Voelker's mathematical research focused on finding the shortest possible network over an array of points. The two-year project was called, "Steiner Trees Over Generalized Checkerboard," and it followed work done by three professional mathematicians. It involved working with grids and rhombuses, slanted squares. She worked on the project with Robin Sanders, IWU assistant professor of mathematics.

Voelker is eyeing a career as a university professor and doing research in math and computer science.

Voelker is from Okauchee, Wis., which is about halfway between Milwaukee and Madison. She is a graduate of Oconomowoc High School.

IWU, founded in 1850, enrolls about 1,900 students in a College of Liberal Arts, College of Fine Arts, and a four-year professional School of Nursing. A $15 million athletics and recreation center opened in the fall of 1994; and a $25 million science building opened in the fall of 1995. The $4.6 million Center for Liberal Arts--a facility housing 60 faculty offices, six classrooms, and other facilities for social science, humanities, business and economics, and interdisciplinary studies' faculty--is slated to open next fall, as well as a $6.8 million residence hall, accommodating about 118 students. The Carnage Commission for the Advancement of Teaching promoted Illinois Wesleyan to a "Baccalaureate I" institution in 1994, a classification that places it among 161 highly selective National Liberal Arts Colleges in the annual *U.S. News & World Report* rankings. *Baron's Profiles of American Colleges*, another respected college guide, rated IWU "highly competitive (+)" in its latest edition.

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