

University of Minnesota Morris Digital Well

University of Minnesota Morris Digital Well

Campus News Archive

Campus News, Newsletters, and Events

6-23-2016

Schrock '17 Learns Job Skills through Computer Science Research

University Relations

Follow this and additional works at: https://digitalcommons.morris.umn.edu/urel_news

Recommended Citation

University Relations, "Schrock '17 Learns Job Skills through Computer Science Research" (2016). *Campus News Archive*. 2187.

https://digitalcommons.morris.umn.edu/urel_news/2187

This News Article is brought to you for free and open access by the Campus News, Newsletters, and Events at University of Minnesota Morris Digital Well. It has been accepted for inclusion in Campus News Archive by an authorized administrator of University of Minnesota Morris Digital Well. For more information, please contact skulann@morris.umn.edu.



Contact:
Melissa Vangsness, Director of Communications
Phone: [320-589-6414](tel:320-589-6414), melissav@morris.umn.edu

Jenna Ray, Editor/Writer
Phone: [320-589-6068](tel:320-589-6068), jrray@morris.umn.edu

FOR IMMEDIATE RELEASE

[Schrock '17 Learns Job Skills through Computer Science Research](#)

Professor of Computer Science Nic McPhee and Laverne Schrock '17 are creating program models that store and analyze change in the process of evolving computer programs.

MORRIS, Minnesota (June 23, 2016)—Nic McPhee, professor of computer science, is one of 13 University of Minnesota, Morris professors collaborating with students in the Howard Hughes Medical Institute (HHMI) Undergraduate Summer Research Program. McPhee and student researcher Laverne Schrock '17, International Falls, are creating program models that store and analyze change in the process of evolving computer programs.

Evolutionary ancestries in genetic programming capture a key process in the evolution of computer programs. They begin with population of random programs, and the best are modified and combined to generate new programs; repetition of this process can often lead to the evolution of programs capable of solving complex problems. Documenting the final results is fairly easy, but it is much harder to examine the overall process itself. By automating the process of storing and analyzing the evolutionary ancestries, McPhee and Schrock are shifting from applied computer science to more theoretical research.

"In my general research area my interest is not so much applied, but instead tends to be more theoretical," says McPhee. "The software side of this research, as well as the database side of it, will prove to be useful [for Schrock] as a technology space where there's a lot of employer interest."

Schrock, a transfer student, was able to participate in HHMI research as his first year at Morris wrapped up. With only a year and one-half until graduation, he is using this project to become informed about potential career opportunities.

"Hopefully I will get some experience with coding and working on larger projects that I haven't had before," Schrock says. "After college that's what I'll be doing: working on larger projects for a long period of time. I don't know what exactly I'll be doing, but I'm hoping to learn more about what my plans could be."

"Employers like evidence that a student can focus on a project for 10 weeks," says McPhee. "Most employers want to see a [computer science graduate] who can build stuff; Laverne, who is indeed building stuff, will be able to sell those skills to just about anybody."

The Undergraduate Summer Research Program is supported in part by a grant to the University of Minnesota, Morris from the Howard Hughes Medical Institute through the Undergraduate and Graduate Programs. More information is available at morris.umn.edu/hhmi.

[View this story electronically.](#)

Through personal and academic discovery, the University of Minnesota, Morris provides opportunities for students to grow intellectually, engage in community, experience environmental stewardship and celebrate diversity. A renewable and sustainable educational experience, Morris prepares graduates for careers, for advanced degrees, for lifelong learning, for work world flexibility in the future, and for global citizenship. Learn more about Morris at morris.umn.edu or call 888-866-3382.

###