1998 Morgan Prize Awarded

JADE VINSON, a 1997 graduate of Washington University in St. Louis, Missouri, and currently a graduate student in the Department of Mathematics at Princeton University, is the third recipient of the AMS-MAA-SIAM Frank and Brennie Morgan Prize for outstanding research by an undergraduate student. He will receive the award at the 1998 Annual Meeting of the Society for Industrial and Applied Mathematics (SIAM) in July in Toronto. The award is cosponsored by SIAM, the AMS, and the Mathematical Association of America, with the three organizations rotating the annual awarding of the prize.

According to the 1997 Morgan Prize Committee, Vinson completed "wide-ranging research in analysis and geometry" during his undergraduate studies. His work, which included the study of fractals, sphere packing, and other areas of discrete geometry, answered difficult mathematical questions "at a high level of sophistication," says the prize citation.

As an undergraduate at Washington University, Vinson was a member of the university's award-winning team in the 1997 Mathematical Contest in Modeling, was an active participant in the Research Experiences for Undergraduates program at Cornell University in 1996, and spent the summers of 1995 and 1997 working on mathematical problems at the National Security Agency. In addition, he has made presentations at eight mathematics conferences and colloquia and has authored or coauthored nine articles that have appeared in or been submitted to journals in the field.

For Vinson, his computing skills, especially his willingness to learn computer programming, have served as invaluable aids to his mathematical research. "I think that computers create an opportunity for undergraduates to collaborate successfully with mathematics professors," says Vinson. "Math professors who did not grow up using computers often have ideas that they are unable to test because of the complexity of the calculations involved. Enlisting the help of an undergraduate to implement [a professor's] idea on a computer can not only test the original idea, but it can also draw the student into the research, with the hope, of course, that the student would eventually begin to contribute his or her own ideas."

Photograph courtesy of Jade Vinson.

Jade Vinson

The Morgan Prize Committee also awarded Honorable Mention to VIKAAS SOHAL, who graduated from Harvard University in 1997. Sohal was cited for his work in the use of mathematical methods to study biological processes within the hippocampus and the cortex; according to the prize citation, he used model building and simulation to investigate the role of two neuromodulators in the formation of new memories, episodic memory functions, and spatial navigation. Sohal is currently a Henry Fellow studying applied mathematics at the University of Cambridge. He will enter the joint M.D./Ph.D. Program at Stanford University in the fall of 1998.

Editor's Note: For information on how to nominate students for the Morgan prize, see the "Mathematics Opportunities" section of this issue of the *Notices*.

—from SIAM News Release