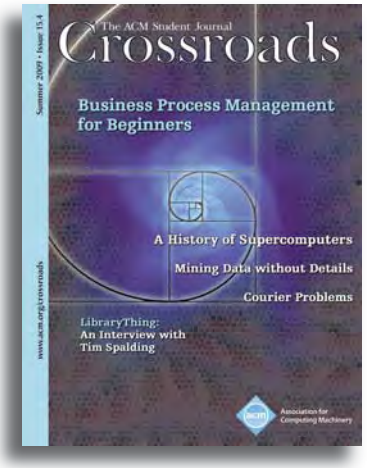
Introduction

by Justin Solomon, *Managing Editor*



In this issue of ACM *Crossroads*, we are pleased to present material written by the newest members of our staff of associate editors. Our editors have a variety of backgrounds and interests in Computer Science, and their articles reflect the breadth of experience both of our staff and of the larger *Crossroads* readership.

Tim Spalding, the founder of popular book cataloguing and bibliophile social networking site LibraryThing, took the time to speak with *Crossroads* editor Anna Ritchie, of the University of Cambridge. In his interview, Spalding explains how he made the unlikely jump from completing a major in Classics to being the owner of an online business. His commentary provides inspiration for amateur programmers, businessmen, and book-lovers alike, showing how computing technology can help transform hobbies and interests into profitable endeavors.

Sumit Narayan, a PhD candidate at the University of Connecticut, presents a short history of high-performance computing in his article entitled "Supercomputers: Past, Present, and the Future." Over a time period of less than fifty years, the development of supercomputers has captured the interest of professional programmers, researchers, and hobbyists, reflecting the rapid development of computing technology for science, business, and other applications. Narayan's article reveals the incredible insight of past researchers in high-performance computing and the unexplored avenues of research that may allow us to develop computers that can compete with the human brain.

In "A Computer Scientist's Introductory Guide to Business Process Management (BPM)," Ryan K.L. Ko, of Nanyang Technological University, combines insights from computer science and business to describe the development of systems to support purchasing requests, outsourcing, management, and other common business-related tasks. His article introduces all the terminology, basic examples, and concepts to allow readers to navigate the literature confidently.

On the more technical side, Malay Bhattacharyya, of the Indian Statistical Institute, describes an important class of combinatorial optimization problems known as "Courier Problems." Initially inspired by the requirements of railway scheduling systems, courier problems are of interest from both practical and theoretical standpoints. Bhattacharyya describes several such problems as well as some algorithmic approaches to their solution.

Finally, new *Crossroads* associate editor Aris Gkoulalas-Divanis, at Vanderbilt University, and his colleague Vassilios Verykios, of the University of Thessaly, describe methods for extracting and sharing trends within potentially sensitive data in their article, "An Overview of Privacy Preserving Data Mining." The methods they present allow for the development of computer systems that extract important facts from data sets without inadvertently revealing individual identities or other private information.

Although this special issue may be brought to you by our editing staff, all other issues of ACM *Crossroads* are composed of material contributed by our readership. We invite you to submit your latest research, ideas, and opinions as soon you are ready to share your work with students, researchers, and practitioners of computer science worldwide. Submission instructions, as well as back issues of *Crossroads* and other special features, can be found on our Web site at **http://www.acm.org/crossroads**. If you are ready to submit, you can e-mail your article to our editing staff at **crossroads@acm.org**. As you can see in this issue, we publish not only research papers, but also interviews, tutorials, opinion columns, and other special features.

Remember to keep *Crossroads* posted as you continue to explore computer science! In the meantime, best wishes for continued success programming, finishing off problem sets, and exploring internships.

Biography

Justin Solomon is an undergraduate at Stanford University, double majoring in Computer Science and Mathematics. Along with his work as the managing editor for ACM Crossroads*, he participates in computer graphics research in collaboration with the Stanford Department of Computer Science and Pixar Animation Studios, competes in programming contests, and plays cello and piano.*