

UNIVERSITY of WISCONSIN  
LA CROSSE

# Distinguished Lecture Series in Computer Science

## Monday, Nov. 2, 2009



## Barbara Liskov

**Barbara Liskov** is an Institute Professor at MIT and also Associate Provost for Faculty Equity. She is a member of the National Academy of Engineering, a fellow of the American Academy of Arts and Sciences and a fellow of the ACM. She received the ACM Turing Award in 2009, the ACM SIGPLAN Programming Language Achievement Award in 2008, the IEEE Von Neumann medal in 2004, a lifetime achievement award from the Society of Women Engineers in 1996 and in 2003 was named one of the 50 most important women in science by Discover Magazine. Her research interests include distributed systems, replication algorithms to provide fault-tolerance, programming methodology and programming languages. Her current research projects include Byzantine-fault-tolerant storage systems, peer-to-peer computing and support for automatic deployment of software upgrades in large-scale distributed systems.

## Schedule of Events

**10:30 a.m. Registration**  
337 Cartwright Center  
UW-L Campus

**4:30 p.m. Registration**  
260 Graff Main Hall  
UW-L Campus

**11 a.m. Symposium**  
**The Power of Abstraction**

Abstraction is at the center of much work in Computer Science. It encompasses finding the right interface for a system as well as finding an effective design for a system implementation. Furthermore, abstraction is an important way to make progress within computer science: once the right abstraction has been defined, it allows previously unresolved problems to be ignored from then on and provides a building block for future work. This talk will discuss abstraction mechanisms, their support in programming languages, and their use in designing and implementing programs.

**5 p.m. Keynote**  
**Security of Internet Storage**

Today more and more information is being stored on the Internet. Internet storage is desirable for a number of reasons. For example, it can enable sharing of information such as medical records among different medical facilities. Also, it can benefit individuals by allowing them to offload various housekeeping operations such as managing backups and archives. However, Internet storage also introduces a number of security issues. Among these issues is concern for reliable storage so that users can access information 24/7 and need not fear that information will be lost. Reliability can be achieved through replication, in which information is stored at more than one computer. This talk will discuss the problems that arise in replicating data and describe techniques that can be used to solve these problems.

For further  
information  
about the  
lecture contact:

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