Ready or not, the world of wireless networking has taken off. Wireless Fidelity, or Wi-Fi™ for short, allows computer users to access networks without wires or cables, thanks to low power radio transmission technology. Signals and data can be transferred from several hundred feet of a hot spot or access point, now available at airports, coffee shops, libraries, and other sites. As convenient as it is, the technology is not without its problems, however, including security issues. We spoke with Dr. Vladimir Riabov, associate professor of math and computer science, who is an expert on computer security.

Q. What are some of the security issues raised by Wi-Fi?
In a wireless network, any computer station within radio spread-spectrum range of another station can transmit and/or receive signals. Potentially, this means bank account numbers, credit card numbers, and passwords, for example, could be accessible to unauthorized users. Today, thanks to new industry standards, however, all certified Wi-Fi™ equipment now comes with security protection.

Q. What can consumers do to protect themselves from security problems?
When purchasing wireless equipment, consumers should definitely look for Wi-Fi certified products. If they are setting up a wireless network in their homes, they should be sure to turn on the security settings in their wireless transmitters. Of the current three security products available—WPA, WPA2 and WEP—the first two provide a higher level of security.

Q. How can we expect Wi-Fi to evolve in the immediate future?
Wi-Fi technology is moving quickly into consumer electronics beyond laptop computers. A new type of Wi-Fi product known as Wi-Fi Multimedia (WMM™) is being introduced and offers enhanced audio, video, and voice applications over a network. Look for Wi-Fi technology to become a part of DVD players, televisions, PDAs, and many other electronic devices over the next couple of years.