



## The Frugal Flyer

For a search-engine pioneer airfares are fair game.

Oren Etzioni, like most people, wants the best deal possible. So it irritated him to learn, after an informal poll of passengers seated around him on a 2002 flight, that he'd paid the highest ticket price. "I thought 'damn it if we're not going to do something about this,'" says the 42-year-old University of Washington computer science professor. A few months later, he began developing technology to help travelers get a better deal on airfare and in June launched Farecast.com, the first airfare prediction Web site.

"Airline ticket prices can be very different in a three-hour period," says Etzioni, "and change several times over 24 hours." But plug your travel plans into Farecast, and you'll likely learn exactly when to bag the best deal. The site issues a list of flights ranked by cost, divines potential fare increases and decreases over the next week, and graphs historical price information for specific trips.

The site's clean design camouflages the complex algorithms behind Etzioni's patented price-prediction technology. It's common knowledge that certain variables—flying midweek, including a Saturday-night stay in travel plans, or booking during busy travel seasons like holidays and summer—alter a

fare. But it's not that simple. "If it was just those variables you wouldn't see the price fluctuating over several hours," says Etzioni. "We use all the variables you can imagine and all the ones you wouldn't imagine. But we don't talk about exactly which ones. That's our secret sauce."

Although the service only applies to flights departing from Seattle or Boston, the company is furiously working to expand to cities across the nation by the end of the year. Price predictions for other travel amenities such as hotels may also be on the horizon.

"People told me I was completely crazy and that it couldn't be done," he says. "In the beginning it didn't work at all, and the graduate student I was working with got really discouraged. I told him, 'Have some faith.'"

Venture capitalists had faith. Last summer investors pumped \$7 million into the company, bringing its total funding to \$8.5 million. "Oren has the ability to realize what's abundant and what's scarce, and uses that talent to identify future technology trends, and those can be commercialized," says Matt McIlwain, a managing director at Seattle's Madrona Venture Group, which was involved in both rounds of funding.

Farecast, Etzioni's third start-up, com-

**Patented process** Etzioni predicts airfares using "all the variables you can imagine."

bins search technologies he pioneered over the last decade and his long-term research in artificial intelligence. After receiving his degree in 1986 from Harvard, Etzioni completed his masters and PhD in computer science at Carnegie Mellon University. He joined the UW in 1991 and looked forward to a "purely academic" career. But four years later he became frustrated with the Internet's mediocre search engines. So he and a grad student created MetaCrawler, which queries a dozen search engines, combs the results, and produces a more relevant list. It's technology InfoSpace maintains today.

"Oren is a big ideas kind of guy. He's very strong technically, but what really sets him apart are his vision and imagination," says UW computer science professor Dan Weld, who recruited Etzioni to the university and with him cofounded Netbot, the first Internet comparison-shopping program, which was sold to Excite in 1997.

"A major theme in my work has been to aggregate large amounts of information and increase transparency by giving it to shoppers so they know when and where to buy," says Etzioni. Next on his to-do list: Design the next generation of search engines. What will these tools reap for the world of info? Etzioni remains characteristically mum. "These are very long-term projects," he says. 🌸