

FOCUS ON OUR ALUMNI: DR. MEHDI HATAMIAN



Mehdi Hatamian
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At work as VP of Engineering for DSP Microelectronics Technology for Broadcom Corporation, Dr. Mehdi Hatamian oversees an office of highly select engineers that have a remarkable track record for generating patents, and sending their ideas into production. "My group does state-of-the-art research," said Hatamian, "which is risky, but we train ourselves to always consider how an idea can be ultimately developed into a product." Mehdi himself has 53 patents with several more pending, and enjoys seeing his ideas make it to the marketplace. One such idea developed at Broadcom was the efficient implementation of signal processing circuits for gigabit transceivers. Now standard in networking electronics throughout the world, Hatamian was part of the team at Broadcom that produced the very first gigabit transceiver to hit the market. He was elected IEEE Fellow for his contribution to the design of high-performance digital signal processors.

While still a student at U-M, Dr. Hatamian worked for NASA's Space Shuttle program, developing hardware and software designs to support in-flight biomedical experiments. Upon graduation, he joined Bell Laboratories, where he was a member of the Visual Communications Research and the VLSI Systems Research departments from 1982-1991. He left Bell Labs to co-found Silicon Design Experts, Inc. in 1991, where he learned every aspect of being an entrepreneur, especially how to turn your creative ideas into something that is marketable, how to work with customers, and the importance of honoring contracts.

With his next move to Broadcom, Mehdi fit right in with a company that has its hand in every aspect of communication. Broadcom is his priority and passion. "I officially started working at Broadcom on Aug. 15, 1996 at 8:15AM and since then every single minute of it has been filled with thrills, excitement, feelings of accomplishments, and the joy that comes from working with some of the brightest engineers in the world," says Mehdi. "Ten years ago it was a small group of relentless people with big dreams and extremely strong will and determination to be the best; now it is an extremely successful and reputable semiconductor company with nearly 5000 employees across the

world involved in every aspect of communication you can imagine and more. It is very likely that you have a few Broadcom chips in your household (in your cable modem, for example), your set-top box, in your cell phone, your laptop computer, your wireless network router, or in your iPod to mention a few," said Mehdi. "They are found in anything having to do with communicating electronically with people."

Some of these chips are found on the walls of Broadcom's co-founder, chairman, and CTO, Dr. Henry Samueli, in a gift artistically fashioned into a clock by Dr. Hatamian, who collects thousands of scrap wafers and chips from semiconductor fabrication facilities around the world to create unique designs of his own imagination. His next design will be found in the lobby of a new Broadcom facility in Irvine, CA.



This 400 lb. clock was created by Dr. Hatamian on the occasion of Henry Samueli's birthday. It is found in the Broadcom chairman's office.

Biomedical engineering remains a strong interest of Hatamian's from his graduate years. In fact, he recently began teaching himself microbiology and genomics. He is involved in the field of medicine through his non-technical involvement with medical companies, and is a board member of one such company, Panacea Pharmaceuticals. "This company has an extremely bright future, and has the chance of producing a cancer drug that is going to be truly effective, even revolutionary in what it can do," said Hatamian.

Mehdi has played a role in several startup companies, finding individuals with good ideas, and then helping turn those ideas into reality. He is particularly gratified when these companies begin to thrive and produce their own unique products, such as "smart test tubes," large-scale injection molding machinery, even the better dog leash.

When asked what advice he would offer today's students, Dr. Hatamian was clear. "Go after your dreams," he stressed. "Do something you love, so that it becomes part of your life." He has seen lots of people with good ideas, but noticed that many lack the drive and tenacity to turn their ideas into reality. "If you really want something, find a way to get it done," said Mehdi. "You must be sincere, believe in it, and not get disappointed if you don't get immediate results. But above all - never give up."

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