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Profiles in Computing

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Advice to students: Look around and see what issues your society faces; Think about how education and technology can help solve such problems. Technology is most valuable when used to enhance society.

Q: Please describe your path to becoming the computing professional you are today.
A: It all started with an interest in Mathematics. Going forward, the relationship became stronger and inseparable. As an electrical engineering student, it became inevitable for me to explore the practical implications. Thus, I came across various challenges addressed and analyzed with very interesting mathematical concepts. In addition, I took on various hobby projects to start with. Eventually, it directed me to the embedded systems industry. Being in this domain helped me appreciate the important role that algorithms and logic play in the organization and development of such systems.

Q: What is your job and why do you love it?
A: I am an Embedded Systems Engineer, specialized in multimedia applications. The main attraction of such systems is the way in which they are developed and deployed on end products that reach real people. The challenging nature of video and audio compression and enhancement algorithms is a fascinating aspect of my work. My activities include development of signal processing algorithms on a Digital Signal Processor, as well as handling the framework on the general purpose processor. Working on a technology which can reach the common people, and improve their lifestyle, is highly exciting and satisfying to me.

Q: Please describe a computing-related project of which you are most proud.
A: During the final year in college, my main project was the "Design and Development of a Heart Rate Variability Analyzer". This involved development of algorithms to analyze patients' heart rate. It also included implementation of an embedded software system that is based on rigorous mathematical operations within constrained memory. The application was to be managed by a handy-battery-driven device. I was proud to develop a product that helps humanity. It was a project which gave me confidence in choosing a career path as well as understanding the importance of teamwork.