Virendra Mahajan, PhD, 1974



What influenced your decision to attend graduate school at OSC?

I was working at the Warner & Swasey Research Center in Solon (outside Cleveland), Ohio on the development of an electro-optical scanner for a German knitting machine company so that an artist-drawn pattern can be scanned and drive a knitting machine to automatically knit fabric. I just happened to see an ad for the Optical Sciences Center in a throw-away magazine. I immediately applied, but never heard back.

When I checked with OSC, they found that the UA Foreign Student Office was waiting for my grades for my India degrees. I explained to the OSC Academic Administrator, Dr. Noble, that only the first, second, or third division was provided by my university, but no grades. He wrote a letter to the Foreign Student Office stating that I was a very good candidate and had done great work on electro-optical scanners that would be useful at OSC. Had he not acted

proactively, I would have probably gone to Rochester, something I did not want to do.

What do you wish you would have known your first day of graduate school? Was there anything you wish you had done to prepare more for graduate school?

Nothing really. I was prepared to hit the ground running.

Which classes did you find most enjoyable? Which ones did you find most difficult?

I enjoyed Dr. Jack Gaskill's OPTI 202 class the most because he always started with a joke, which I never understood. Just seeing the other students laugh was good enough for me. His humorous personality made an impression on me, and I chose him to be my dissertation advisor. The other course he taught related to optical data processing, and was difficult for me. I did not get much out of it.

Was there an individual (professor, advisor, staff, friend, family member) who played a particularly important role in your education?

For me, it has to be my advisor, Dr. Gaskill. After I defended my dissertation successfully, he took us out for dinner. He realized that my vegetarian food was not very good, so he took us out a second time a few days later. That is when I learned from him the concept of a 'doggy bag' to take home the left-over food.

What was your research while attending OSC?

I worked on real-time wavefront correction using acousto-optic Bragg cells. I wrote several papers on it by the time I had completed my dissertation. It became adaptive optics that used deformable mirrors.

What was the cost of rent in Tucson while you were in school?

Our son was less than two years old when we arrived in Tucson in August 1971. We rented an apartment, probably for \$75 a month. We broke the lease after two or three months and rented a house from a lady for \$100 a month, as she moved to live with her son who worked for Nabisco in Mexico. We stayed in that house till we left for Boston in December 1974.

If you owned a car during graduate school, what year and model was it?

I owned a VW station wagon that I bought new in September 1969 for less than \$1,800. I ran it until we left Boston for Los Angeles. I could have brought it to LA and run it some more, but I did not feel right to have Aerospace pay for its transportation. I sold it to an MIT student from Haiti for \$100. I wanted to give it to him for free, but he wanted to pay.

What was your favorite restaurant/student hangout near campus?

La Cuchina, with great Italian food. I think Jack may have taken us there at our request for the second dinner. No favorite student hangout, as I was married. My wife was a student in Educational Psychology, and our son was enrolled at the children's school under the care of her department.

What did you do for fun during your time in graduate school?

Fun was taking care of the family, working in shifts. Our son grew up to be a cowboy with two toy guns in his holsters ready to 'shoot' in a split second.

What was most memorable about your commencement ceremony?

I had moved to Boston, so I did not attend the commencement ceremony. While I was teaching at OSC, I thought of asking Jim Wyant to hand me my diploma at a commencement ceremony that he officiated, but I never brought it up with him.

At the time of your graduation, what were the most sought-after jobs/most popular industries/most popular companies?

I sent about 150 applications, but they all stayed in the company folders, perhaps because I was not a U. S. citizen. However, I got two offers —one from Draper Lab and the other from Lincoln Lab. I accepted Draper Lab because the person who hired me expressed much more interest. Surprisingly, I received my security clearance and worked there for about nine years, the first seven without being a citizen.

What was your first job after graduation?

I worked at Draper Lab on a DARPA project on space based optical surveillance.

What was the most significant world event during your time in graduate school. How were you affected by this event?

Two of my brothers are retired (Indian) army officers. They fought a war with Pakistan and contributed to the formation of Bangladesh. My elder brother retired as a colonel and younger as a brigadier general. I am very proud of them.

Was there a campus or community event in Tucson that was especially important to you?

Soon after I joined OSC, UA assigned us a host family. They had three small children and invited us for dinners on special occasions. That was an interesting cultural experience. We are still in touch with our host lady and meet up with her when we go back to Tucson.

What advice would you give to this year's graduating class?

Enjoy your schooling but work hard.