Doctor Hoffman greatly influenced my life and worldview. He had the courage, imagination and vision to teach a subject that was so ahead of its time that it seemed like science fiction or magic, and certainly an opportunity few people in High School had at the time he started teaching it. He showed me (and others) that anything is possible if you imagine it and set your mind to it.

I still recall the first day of computer class in tenth grade, when Doctor Hoffman taught us the meaning of the word "ubiquitous". It may have seemed unusual for a computer teacher to teach proper grammar and vocabulary, but it set the tone for his integrated view of learning: he exemplified the idea of a renaissance scholar in the modern world. It was known that he had been a tennis coach, a math and then computer teacher, an advocate for students, and that he even had students come to his house from time to time. I don't believe I ever saw the inside of any other teacher's house in all my years of education, but Doctor Hoffman was not one to be limited by what was usual or expected.

He had a greater influence on my life than he probably knows. When a Public Relations specialist from Atari contacted him to suggest a student for the newly forming "Atari Youth Advisory Board", he gave her my name and called me out of class to talk to her on the phone about going to California for a few days for a meeting. This altered my life even more than he could have guessed: my closest friend for the next 6 years was someone I met through that experience, and my decision to go to college at Stanford was largely because of its proximity to her home.

He gave me my first paying job, by applying to the US government for a grant to write software to teach English as a second language. What a head-rush it was for a high school student in the mid 1980s to be a paid computer programmer! That made me feel truly extraordinary.

I have saved for last the greatest lesson he taught me. If you think about how much work something is going to be, you may never start what turns out to be a worthwhile undertaking. He encouraged and coached me through two gargantuan projects while I was in High School: writing a textbook about a computer language, and writing a computer program to graph any equation. Both started as small projects...

At his direction, I had learned a new computer language, FORTH, and then he wanted me to write a "two to four page manual" that he could use to help teach FORTH to other George Washington High School students. Well, once that was done, he suggested I expand it into a booklet, and when that was done he suggested I expand it a bit more, into a complete textbook. Had I known what a project that would be, I may never have started; what was initially a 1-2 day project turned into months writing a 130-page textbook, negotiating with a publisher/editor, making changes suggested by the editor, and signing a contract to have the textbook published. Although FORTH never became a popular computer language and the publisher shelved the textbook about it, the fact I had completed the project and signed a book contract gave me a huge feeling of pride and accomplishment.

The other project actually did reach fruition and publication: I wrote a computer program to graph any equation (this was in the days before graphing calculators existed). It started as a personal project for

me, to help me visualize complex equations and changing variables, but Doctor Hoffman imagined that I could turn it into a user-friendly program that school districts might be interested in buying to help them teach math. So, again with his coaching, I created a complete, easily usable consumer-ready product for use on Apple II computers, and then had to write a Teaching Guide to accompany the program. GRAPHMASTER was actually published and I did receive payment while I was in High School and then some additional royalties over the next few years; I believe a few school districts in New York and the Northeast bought it before it became obsolete. In fact, the summer after my freshman year of college, the publisher had me write a version for the Commodore 64 computer because that was the computer used in certain school districts that were interested in it.

In a way, the existence of the entire computer education department at George Washington High School, so many years ahead of its time, was an example of this approach to projects and life that Irwin Hoffman exemplified. I was told it had started as an after-school club for students to visit a large computer somewhere in Denver, then grew as Dr. Hoffman kept adding on a piece at a time, into a full-fledged department for teaching students to be computer-savvy. During my three years of high school, it went from one small classroom with 6 Vector Graphics computers, to a larger classroom that included several Apple II+ or Apple IIe computers, to an even larger room with numerous Atari, Apple, and IBM PC computers, to a multi-room department with different configurations in different rooms and different class levels at different times of day. Today it would seem ridiculous not to have computers in a classroom, but Dr. Hoffman was a visionary and years ahead in this.

I consider it one of my greatest fortunes that I got to be mentored by Doctor Irwin Hoffman. Not many high school teachers can be described as mentors, but really that is what he was. He was one of the greatest influences on my life in my formative years. I graduated high school more than thirty years ago, in 1984. I ultimately went into medicine rather than computer science. When I graduated medical school in 1994, the ceremony required that my hood be placed by someone with a doctorate level degree. Most of my classmates had a relative who was a medical doctor do this. I asked Irwin Hoffman.

## **POSTSCRIPT**

I was asked a few years ago, in an email from Beverly Simmons (whom I have never met), to write a short summary of an incident or story about Irwin Hoffman. Unfortunately, the request came at the worst possible time in my life and I had to put it on the back burner, but I never forgot the request and I hope my response is still relevant.

Having had so much to say about him, and having put it off for about 5 years since I was asked to write this tribute, I must add as a personal note that there are tears in my eyes having written this and recalling what an influence he was so many years ago. As a poor excuse for how late this is, I can only explain that I went through multiple great losses and intense pressures in the past 5 years, and kept putting it off until I would be able to concentrate on it. Now that it is done, I only hope whatever reason Beverly asked me to write this still applies.