This monthly article highlights one of our branch members. We hope that you enjoy knowing a little more about your fellow members and the interesting life they have had. If you have someone you would like to nominate or if you would like to help author an article, please email the editor, Ron Nakamoto, at ron.nakamoto(at)yahoo.com.

## **JACK WU**



## Do you know these two things about me?

1. Part of my Chinese name includes a Chinese character that puts me in the seventh generation of the Wu family. There are ten-generational characters that together form a Chinese tone poem reciting good thoughts and behavior. No one knows who created the Chinese tone poem. My father, who was the last living elder of the sixth generation, composed the ten character Chinese tone poem for the next ten generations. Fighting increasing bouts of dementia, my father finished the tone poem in less than a year before he passed away.

2. A San Francisco immigration officer assigned me my name Jack when I entered the US. He said my Chinese name written in English was unpronounceable. In the past, this was the common practice for many Asians entering the US.

I was born in Shanghai in 1946. My mother and I entered the United States when I was only six months old. My father was already in the U.S. as part of the Chinese delegation assigned to the new United Nations headquarters in New York City. My father, a career diplomat under Chiang Kai-shek and his Nationalistic Government, became First Secretary of the Delegation. Several years later he resigned rather than accept recall to Taiwan, a place where he never lived or visited. He saw opportunity in the US and we were allowed to stay. Making a major change in our lives, my father bought a poultry farm in New Jersey. I have many good memories living on the farm with the chickens, my dog and cat and lots of open space compared to my previous urban life in Manhattan and Mineola, Long Island. My first three years in a New Jersey school was in a one-room schoolhouse with three grades combined. In 1956, the farm failed and we drove with my meager stuff to Chicago. My father worked as a draftsman at Skidmore, Owings & Merrill, the architectural firm designing the huge new O'Hare Airport. My father took mechanical engineering classes and became an HVAC engineer. He helped design and made many of the blueprints for the HVAC systems in the original O'Hare

terminals. During that time we became naturalized US citizens. We later moved to the Chicago suburb of Niles Township where I attended Niles West High School.

I entered MIT after graduating only knowing that I wanted to be an engineer. I eventually chose Course 16, the Department of Aeronautics & Astronautics. All MIT departments are numbered. Course 16 had the least amount of required courses for graduation compared to the other departments. Living in the Phi Sigma Kappa Fraternity chapter in Boston and playing many different sports helped me maintain my sanity while pursuing my relentless studies.

After graduation in 1968, I worked on Project Apollo at the Space Division of North American Aviation in Downey, CA. I tested the simulation program for the analog autopilot used as the backup for the digital autopilot made by the MIT I-Lab. The simulation program used FORTRAN running on an IBM 360 mainframe. I really enjoyed southern California while living on the beach. However, a year after Neil Armstrong walked on the moon, I was out of a job.

Disillusioned with being an aerospace engineer, I joined Pacific Telephone Company in 1970 working in Sacramento in the Chief Engineer's Department. After four years, I was not satisfied with my career. After long talks with my wife, we decided I would attend the University of the Pacific McGeorge School of Law. It was the absolute worst time of my life. Working full time, attending evening school, and supporting two pre-school kids and my wife was a formula for long-term sleep deprivation. Somehow, we survived but I had no real attorney prospects when I graduated and later passed the California Bar. I took a Pac Bell work assignment that brought us to San Francisco, where I managed the toll switching machines that handled every long distance call going into and out of San Francisco and Marin County. These machines were ancient crossbar tandem electromechanical switchers not having a single solid-state component. My job was to manage the future shutdown of those machines that were soon replaced by the modern Electronic Switching Systems. Managing the labor force, the union contract and the many union grievances was not a good time in my life, second worst to my time studying law. An older union steward proudly explained to me that labor and management were always at war. Friction over the current labor contract became the negotiating points for the next contract. As a second level supervisor, I had no ability to change the existing contract.

Several months before the scheduled cutover and shut down of my crossbar tandem switchers I serendipitously met a recruiter who told me that Sperry Univac was looking for a patent attorney trainee. In 1979, I started as a trainee working at ISS, a disk drive company located in Santa Clara and bought by Sperry Univac. ISS was developing a new state of the art disk drive using IBM's Winchester flying read/write head technology. It operated on fourteen-inch spinning aluminum memory platters mounted in an enclosure the size of a washing machine and had a capacity of fifty kilobytes.

In 1988, I joined Wang Laboratories where I wrote patent applications for Wang word processors, data base storage systems and graphical interfaces. I also handled other intellectual property matters including trademarks, copyrights and licensing. I wrote and filed Dr. An Wang's last patent application for a small computer keyboard. Wang competed poorly when it entered the data processing minicomputer and PC business.

Before the Wang bankruptcy, I interviewed at Hewlett-Packard Company in Palo Alto the day before the Loma Prieta earthquake. I joined HP in 1990 working in Building 20, "Intergalactic Headquarters" in Palo Alto. Initially, I supported various parts of HP Labs and wrote, filed and prosecuted patent applications covering semiconductor technology, high temperature super conductivity, analytical and medical sensors and instruments. My responsibilities grew to include intellectual property legal advice (trademarks, copyrights, licensing, trade secrets, and patent infringement litigation) for the various commercial product divisions and their R&D development teams. I was on the HP team that negotiated with Philips Lighting to create the Lumileds Joint Venture Company for development, production and sales of LED based lighting products worldwide. HP was a pioneer in LED substrate fabrication but had no experience in the lighting business dominated by Philips Lighting, GE and Siemens.

In 1999, HP created Agilent Technologies as a wholly owned entity and began the laborious task of separating its test and measurement, medical and semiconductor entities from the other much larger HP commercial business segments such as computers, printers, and enterprise consulting. Carly Fiorina became HP CEO and Ned Barnholdt became Agilent CEO when Agilent fully separated from HP in 2000. I joined Agilent because I knew Ned who worked and then led test and measurement for most of my time at HP. At Agilent, I was involved with the spin-off of the semiconductor business to a new entity Avago; the sale of the medical product division to Philips; and the sale of Agilent's share of Lumileds to Philips Lighting. I retired from Agilent in 2006.

My years as an intellectual property attorney were the most satisfying because I combined my long time interest in engineering and science with patentable inventions as well as being educated by many creative inventors. I had a productive career giving intellectual property legal advice and pursuing transactional legal matters covering patents, trademarks, copyrights, trade secrets, technology joint ventures and licensing agreements and patent infringement litigation. Giving legal advice to managers and company officers was very stressful, the magnitude of which I did not acknowledge nor recognize until I deflated a year after I retired.

I transferred into Branch 35 from Branch 153 in Sunnyvale, which disbanded because our membership ranks diminished. Even though in its prime Branch 153 was almost one-third as large as Branch 35, I knew every member personally. The members of every SIR branch each have interesting lives and work experiences. Branch 35 is large and very well managed. I joined because I already knew quite a few existing members,

some of which I have not seen for many years. Every luncheon meeting I try to talk with one or two other members whom I do not yet know.

Being married for 46 years, my wife and I are still learning to enjoy the retirement phase of our lives. My wife retired after working twenty-one years at Sunnyvale Community Services, a social welfare agency. We know we each need some separate time from one another with our own pursuits because being together 24/7 causes more friction than happiness. My main activities now are tennis, some golf, and a focus on fitness, traveling and eating well. After fifty years and three careers of sweating over and micro managing the small stuff (of which FORTRAN programming is the ultimate because the mainframe is so dumb), I now find that loosening up greatly simplifies my life. I have always tried to learn from my mistakes. Being involved with three young grandchildren is both invigorating and exhausting. I forgot how young ones have this wonderful curiosity and genius ability to learn. I cannot recapture that same wonderment playing golf but I can laugh over my mistakes and just enjoy the occasional moments of making a great shot or long putt.

Knowing that humans have a great capacity for good and evil, I believe each of us can help make the world better around us by paying it forward from time to time. Peace on earth should be an ongoing goal for all Sirs.