Whatever Happened to Mary Pickett

Then Capsule Summary Now



Born in: Niagara Falls, NY
Grew Up in: Niagara Falls, NY; Neenah, WI

High School: Neenah High School

Undergraduate Degree: BS Math, Iowa State,

1968

Entered Purdue: Fall, 1968
Purdue Degree: MS CS, May 1970

Later Degree: MBA, University of Michigan, 1984 Lived/Worked in: Suburbs of Philadelphia PA and

Detroit MI (current residence)



Purdue Highlights

Mary came to Purdue in the fall of 1968 as the result of bad advice from two lowa State professors!

Mary started out as a biochem major and worked in her advisor's lab. At the end of her freshman year, her advisor came to her to say that the work she had planned to do to win the Nobel Prize had just been done, there was no important work left to do in biochemistry (yeah, right!), but she could still change majors. Why didn't she go over to the Home Ec school to see what they had to offer. (Sadly, a lot of women were getting that sort of advice then.)

So Mary headed over to Math, another academic love. After several years, including doing special math classes with her new advisor, she asked him what she was going to do with this math major. He said "Teach high school. What else would you do?" (More typical advice to women back then!)

So Mary again switched fields and ended up at Purdue in CS. Third time's a charm! She loved it and stayed in CS for her whole career.

While at Purdue, Mary had a fellowship her first year and then worked for Prof. Carl DeBoor verifying (or perhaps trying to break) the NAPSS software her second year. During the summer of 1969, Mary worked at Jet Propulsion Lab in Pasadena CA designing the antenna for a future space probe.

Career Highlights

Mary's initial job after Purdue was at RCA, where she developed the first Indexed Sequential Access Method software that allowed multiple simultaneous updates to the database. Unfortunately, RCA decided to get out of the computer business after the final testing of the software, and Mary moved to GM before its release. It wasn't until years later than she ran into someone who had used the software and she learned how successful it had been, enabling numerous applications that hadn't been possible until then.

Mary spent the remainder of her career at GM Research Labs working on a multitude of projects. The first was a new programming language for the development of CAD software. That interest in programming languages carried over to development of a new multitasking programming language for use in industrial applications. The ILIAD language was an interpretive language, with interpreters and operating systems Mary and her group built for several minicomputers used by GM in plant floor operations. The ANSI PL/I committee adopted the ILIAD concepts as a multi-tasking extension.

Mary then joined the team which built the first solid modeling CAD system used in production, with hundreds of GM engineers using it for design of mechanical components of their autos. That provided the basis for Mary's RoboTeach robot programming graphical system, a strawman which greatly influenced the way robots are programmed today. As an extension to solid modeling, Mary then developed the GeoWrap system for automatically determining the "skin" of a solid model to remove proprietary mechanical structure when sending the design outside GM and to reduce the data processing required in downstream applications. For her work on GeoWrap, Mary won GM's McCuen award for outstanding research.

For a few years, Mary managed all of the CAD/CAM research at GM. But she much preferred doing the research to managing it and so returned to a research position.

During her career, Mary was also active in professional activities, serving as President of the Metro Detroit ACM chapter, Treasurer for the ACM Annual Conference, member of an NSF Presidential Young Investigator panel, member of the evaluation team for the DoD Ada

	programming language, and member of the ANSI PL/I committee.
CONTACTS	PERSONAL HIGHLIGHTS
Email: pickett.mary@gmail.com	I have been married for 31 years to Rich Teets, a Stanford PhD in physics. Rich worked for General Motors and then Delphi until he retired in 2009. We have one child, Alan, who got both his BS and MS in mechanical engineering at Carnegie Mellon University. Alan and his partner Tyler live nearby in Ann Arbor, where Alan works in the auto industry and Tyler is a PhD student in materials science engineering at the University of Michigan. In 2003, I retired from GM after 30 years to have more time for two growing passions of mine. One passion is mentoring non-profit organizations as they build their presence on the Internet. 10 years ago that meant elementary instruction on creating and updating a website for one group at a time. Today it means speaking to larger groups at state and regional meetings to help them set policies and implement best practices for websites and social media. Being involved in rapidly changing technology has certainly kept me from letting my tech skills get stale. My other retirement passion is helping those in need, primarily through my church. Besides doing things like delivering food to lowincome seniors and cooking meals for the homeless shelter, for several years I co-chaired the overall team coordinating our local, national, and global projects. We had 26 groups within that team. One raised \$100K and built a children's home in Costa Rica. Another raised funds and provided workers for half a Habitat for Humanity house each year. A third group sent a team to work with teens in Appalachia each summer. Yet another group took food and clothing down to the homeless on a street corner in Detroit twice a week all winter. It's wonderful to be able to "pay forward" our good fortune to those who have not had our opportunities. I had a wonderful career at GM, but chairing the team facilitating the efforts of those 26 groups may be the most satisfying work I have ever done. Now I'm the Secretary for the board of a new social service agency working out of a church in Detroit. It's exciting to

www. Read Seed Feed. org

people want to support Detroiters as well as to be able to provide programs to help people in this economically depressed city.

In my leisure time, I love to read, spend time with friends, and

travel. Lots of photos on www.petesticket.com.