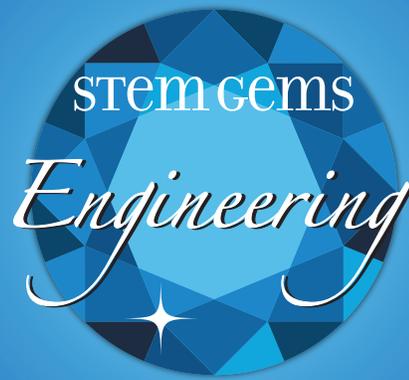


STEM Gem Career:  
**COMPUTER SCIENTIST AND ENGINEER**

STEM Gem:  
**BARBARA LISKOV**

*"I was interested in doing it, there was an opportunity, so I just did it."*



Is a career in Computer Science and Engineering in your future? Are you interested in learning various computer languages to build useful software applications? STEM Gem Barbara Liskov led the design and implementation of an early programming language named CLU, the first to emphasize modular programming based on data abstraction. Read her story and digest. Watch one of her videos. Then, with your STEM Gems Tribe, **discuss**, **explore**, **reflect**, and **act**.

## DISCUSS

1. How do Computer Scientist and Engineers like Professor Liskov make a difference in the world?
2. What experiences did Professor Liskov have that led to her pursuit of a career as a Computer Scientist and Engineer?
3. What is Professor Liskov's educational background?
4. What are some of the challenges that Professor Liskov faced along her journey?
5. What are some of Professor Liskov's key accomplishments?
6. What inspired you most about Professor Liskov's story?
7. Professor Liskov says: *"I was interested in doing it, there was an opportunity, so I just did it."* How important is it to have an attitude and perspective like Professor Liskov's?

## EXPLORE

1. To pursue a career as a Computer Scientist and Engineer, what college majors should you consider? What colleges and universities have programs in these areas?
3. What companies hire Computer Scientists and Engineers (also known as programmers)? What is the salary range for a Computer Scientist and Engineer?
4. What classes should you take in middle and high school to prepare for college and a career as a Computer Scientist and Engineer?
5. Name at least two other women Computer Scientists and Engineers. How are they similar to Professor Liskov? How are they different?
6. What professional organizations support women in Computer Science and Engineering? Do they have programs available for middle and high school students?

## REFLECT

Professor Liskov's mantra is: "don't be intimidated, just do it!" What, if anything, intimidates you? Once you have acknowledged what intimidates you, what can you do to adopt Professor Liskov's mantra?

## ACT

It's time to step outside your comfort zone. Name one concrete thing you will do before your next meeting that will have you one step closer to becoming a STEM Gem. Blog about it. Include it in your written or photo journal. Hold yourself accountable.

***Work hard. Be brave. Stay curious.***

**BE A GEM!**

*Stephanie Espy*

P.S. I'd love to hear about your journey. Share on Facebook, Twitter, or Instagram and tag @STEMGemsBook #STEMGemsTribe, or email me at [tribe@STEMGemsBook.com](mailto:tribe@STEMGemsBook.com).