In 1984, 37% of bachelor’s degrees in Computer Science were earned by women. By 2014 that percentage dropped by half, with women earning only 18% of CS bachelor’s degrees. In 2014 Google conducted a study of more than 1,700 students in the US in order to understand what motivates women to study Computer Science.

Researchers found four controllable indicators that contribute to women choosing to study Computer Science:

Social Encouragement
Encouragement from family, friends and educators, regardless of their technical expertise, reinforces existing interest and can foster interest where none exists. Outreach programs should include a parent education component, so that parents learn how to actively encourage their daughters.

Self Perception
Interest in puzzles, problem solving and tinkering can lead to a passion for, and personal confidence in, Computer Science abilities. Providing young women with the opportunity to practice these skills in a supportive environment in activities related to their passions can help build confidence and interest.

Academic Exposure
Experience with Computer Science in middle and high schools can motivate young women to pursue computing. Support for organizations working to expand these opportunities to more schools can increase academic and informal access, provide a greater understanding of Computer Science, and help young women make informed decisions about degree and career options.

Career Perception
Visibility of female role models in Computer Science and telling stories about the positive social impact careers in computing can have, can enable young women to visualize themselves in the field.

All findings are from the 2014 Google report Women Who Choose Computer Science— What Really Matters
See more at http://g.co/csedu