

SAS/GRAPH helps your kids choose a career

During Computer Science Education Week, Dec. 4-10, SAS is recognizing the transformative role of computing and the need to bolster computer science at all educational levels.

Although computer science jobs may be abundant in the next few years, there may be a shortage of college graduates in the science, technology, mathematics and engineering (STEM) fields to fill them.

Robert Allison, a member of the Guided Business Visualization team, and known around SAS for his use of SAS software to graph data and share it on his internal blog, recently created a graph that plots college majors and ranks them according to unemployment and salary range.

“Someone [forwarded me a blog](#) that featured some data plotted using both R and SAS, and they theorized that maybe I could improve upon the SAS graphic,” Allison said. “So I downloaded their data, and gave it a shot.”

Allison took the grid of about 200 small-multiple pies and, using SAS/GRAPH® software and simple traffic-lighting colors, plotted all 200 majors against the same axes, so they could be easily ranked and compared. On the axes, he also showed the expected range of salaries.

The graph is followed by a table of the same data, sorted in the same way as the graph, and the unemployment values are color-coded the same way as the colored dots in the plot graph. The table allows the user to easily search for certain majors by using the browser's text search (such as Ctrl+F). You can also click on the dots in the graph to launch a Google search on that career name.

See [Allison's plot graph and table](#).

The findings show that salary ranges for computer science, math and engineering majors far exceed those of other majors and that unemployment rates in those job fields are much lower.

“Of course, I'm not saying that expected salary and employment rate should be the only – or most important – factors in your kids choosing a career path, but it's certainly something they should consider!” Allison said.

Original data found here:

<http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/whatsitworth-complete.pdf>
(specifically tables on pages 64, 74, 82, 90, 100, 112, 124, 134, 144, 152, 160, 168 and 176).