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For statisticians, the world is truly a numbers game CMU celebrates first 'Statistics Day'

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Lake Fong/Post-Gazette

Theodore Dasher, 21, left, and Shazwan Azizan, 22, both Carnegie Mellon University students, wear Star Wars storm trooper masks while participating in a campus celebration of the first **World Statistics Day** Wednesday. About 150 CMU faculty and staff formed a human histogram based on their height.

How did you celebrate the first World Statistics Day?

If you were like many Americans, you relied on statistics to compare prices or job availability on Wednesday, the very day the United Nations had designated to point out the importance of statistics around the world.

But if you were on the Carnegie Mellon University campus, well, statistics majors just aren't going to let an opportunity like 10/20/2010 go by with business as usual.

"We knew right away we wanted to throw some event in celebration, create an event that was kind of cool for statisticians but also for all of our students to get into," said Hannah Pileggi, a senior from O'Hara majoring in statistics.

Ms. Pileggi and Emily Butler, a senior from Scranton also majoring in statistics, developed one idea in cooperation with the Statistics Department and the department's Undergraduate Student Advisory Committee:

Ask anyone and everyone on campus to meet at CMU's Gesling Stadium at 1:30 p.m. Line them up in rows along the yard lines by height. Give each woman a sheet of pink paper and each man a sheet of blue paper to hold up. Ask each person to provide some basic data. Take pictures. Analyze the information later.

So Wednesday, approximately 147 people lined up on the football field to create a human histogram of heights, which is a graphical representation that essentially looks like a bar graph. The lengths of the rows can be compared one to the other.

The count is approximate because it's based on the number of forms turned in; some may not have turned them in.

At the 50-yard line, students who were 5 feet, 6 inches formed a row along the yard line. To the left and to the right of the 50-yard line, the heights changed by one inch every two yards on the field.

At the shortest height to the left of center, four women lined up at 5-1. At the tallest height to the right of center, one man measured 6-5.

The tallest person, Chad Schaffer, an assistant professor of statistics at CMU, said the group is "really not representative. That's not the point. The point is to encourage people to think about statistics."

The most popular lines were for heights around 5-9 and 5-10, resulting in an expected bump, with smaller numbers at the extremes.

When the pink and blue signs went up, it was clear there were more women at the short end and more men at the tall end, another anticipated outcome.

Gordon Weinberg, an adjunct faculty member in statistics at CMU, was among the shortest men at 5-4, or as he put it, two standard deviations below the mean for a male.

He said the event was "a lot of fun" and had a serious purpose: "Statistics and data analysis are integral parts of the modern world," he said.

The tallest woman, Freida Williams, a CMU human resources manager who is 6-2, said she came just because she thought it would be "an interesting, historical event."

While she didn't use any statistical terms to describe her place, she said the small number of women in the tallest categories "represents well how it is in life for me."

CMU has more than 150 undergraduates majoring in statistics and many more students are required to take statistics in a wide variety of majors.

Both Ms. Butler and Ms. Pileggi plan to study statistics in graduate school.

Ms. Butler said she was undecided about her major when she started at CMU but was sold on statistics after two courses. "I realized it was a great mix of math and also the application of math."

Ms. Pileggi at first majored in electrical and computer engineering. "I realized what I liked the most about it was the math and the computation. I became a math major. From there, statistics is really what resonates in me as explaining the world. ...

"It applies to everyone."

Education writer Eleanor Chute: echute@post-gazette.com or 412-263-1955.

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