Goodσελλ Gazεττε

● ● ●

Carleton Teams Compete at Konhauser problemfest

On Saturday Feb. 29, three teams of Carls participated in the 28th annual Konhauser Problemfest at Macalester. The team of Ben Richardson, Hiromichi Ueda, and James Yan nabbed second place out of 19 teams. Two other teams tackled the challenging set of ten problems — Duc Nguyen, Noah Pinkney, and Juanito Zhang Yang; and Nick Pandelakis and Will Dudarov. Congratulations to everyone who participated!

Mark Your Calendars!

Next term there will be numerous talks, group comps topics will be revealed, we will welcome a new cohort of majors, and end the term with a picnic. Here is a rough calendar of events for spring term.

- March 31: Colloquium by Sarah Koch, a professor from the University of Michigan
- April 7: Colloquium by David Spivak, a research scientist from MIT
- April 14: Colloquium by Edna Janes, a graduate student from Rutgers
- April 21: Groups comps topic presentations
- April 28: Welcome event for new majors
- May 12 and 14: Group comps presentations
- June 2: Department picnic

As always, stayed tuned to the Gazette for additional event details and announcements.

MinneWiADS: Women in Analytics & Data Science set for May 15, 2020

Save the date for MinneWiADS, a brand new conference on May 15 bringing together leaders, experts, and interested individuals in analytics and data science, especially those who identify as female and non-binary, to share knowledge, make connections, and inspire one another. This event will include technical sessions and business applications, as well as panel discussions on gender diversity, experiences in the field, women in leadership, and much more. Contact wiads@minneanalytics.org to get involved! Learn more at http://minneanalytics.org/minnewiads/.

Job, Internship, & Other Opportunities

IPUMS-USA - Data Analysts

IPUMS makes the world's largest collection of individual-level population and health survey data freely accessible online. Thousands of researchers use these data worldwide, and you can contribute to the development and enhancement of this public good. We seek one or more data analysts to join our diverse team of research and information technology professionals. We are looking for smart, technically-minded people who enjoy working with data.

IPUMS is part of the Institute for Social Research and Data Innovation at the University of Minnesota. The job description, qualifications, and other details are available along with the application procedure at https://assets.ipums.org/_files/335560_Data%20Analyst_USA+Health_Spring2020.pdf. Detail-oriented math majors welcome!

Aerojet Rocketdyne - Data Reduction Analyst

Aerojet Rocketdyne is seeking a Data Reduction Analyst to join our facility in Redmond, Washington. In this role, you will play a vital function in the successful hot fire testing of our rockets, which includes testing of monopropellant, bipropellant, and electric thrusters for various in-space applications. The Data Reduction Analyst will contribute to our success by preparing data reduction software to process raw data from rocket engine test firings. Find more information at carleton-csm.symplicity.com/students/index.php?s=jobs&ss=jobs&mode=form&id=dfc46251b349cc1af1c4270f0e9af4cb.

Problems of the Fortnight

To be acknowledged in the next *Gazette*, solutions to the problems below should reach me by noon on Tuesday, March 31. (The extra time is because of our spring break.)

1. Suppose that there are equally spaced points $P_1, P_2, P_3, \ldots$ along a straight line in the plane, and there is another point Q (not on the line) whose distances to P_1, P_2, P_3 are the integers $7, 3, 5$ in that order. Is there another of the equally spaced points, say P_n with $n > 3$, such that the distance from Q to P_n is also an integer? If so, find such an n and the corresponding distance. If not, show why not.

2. Consider a half-disk in the plane, say the top half of the unit disk:

$$\{(x, y) \,|\, x^2 + y^2 \leq 1, \, y \geq 0\}.$$

Find the smallest possible area of a triangular region that contains this half-disk and whose base includes the interval $[-1, 1]$ along the x-axis (which is the base of the half-disk).

Both problems posed February 21 were solved by John Snyder and by "Auplume"; there was an additional attempt (that came close) on the second problem. The thaw is proceeding apace, but the hoped-for effect on student solutions has not been observed yet.

- Mark Krusemeyer