Goodsell Gazette

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9th Week Update

This will be the last Gazette of Fall Term -- the next issue will come out on January 11. So far this fall, numerous talks have been given, a few independent comps students presented their findings, and several students have participated in mathematics- and statistics-related conferences and competitions. There isn't too much going on this week, but read on to get updates on jobs and internships and to take a crack at this issue's Problem of the Fortnight. Good luck with the end of term, everyone! Have a great winter break!

Sam Patterson's Retirement

Sam Patterson is retiring from our department and will teach his final Carleton class next week. The Goodsell Gazette asked him for some parting thoughts.

GG: How long have you been at Carleton?

This is my 31st year. I spent 4 of those years serving as Associate Dean of the College, followed by a sabbatical, so I was gone from the department for five years.

GG: What was the most meaningful part of your time here?

The most meaningful part of my time has been working with great students and colleagues. I've enjoyed teaching such a variety of courses with so many great mathematical ideas to students eager to learn them.

GG: What's next for you?

I will have more time for research, mathematical modeling, and beekeeping!

Minnesota Data Analytics Competition

MinneMUDAC is a data science competition, and this year's challenge was to explore what factors are related to voter turnout in Minnesota, along with predicting the turnout for this year's midterm election. Here are the students that participated in MinneMUDAC:

Nobuaki Masaki
Siang Wongrattanapiboon

Yuta Baba
Varit Bhanijkasem
Jordan Navarro
Will Dudarov

Job & Internship Opportunities

Compass Lexecon, Summer Internship

One of the world's leading economics consulting firms, Compass Lexecon provides law firms, corporations and government clients with clear analysis of complex issues. Current juniors, only, are elegible for the summer internship. This position demands knowledge of or interest in economics, a broad range of research skills, and the ability to perform quantitative analysis. Summer interns work with case teams in nearly all aspects of projects including a variety of quantitative and qualitative tasks, such as: (a) gathering data and performing analyses, including spreadsheet modeling conducting industry research; (c) reviewing analyst reports and business documents produced in litigation; (d) assisting with the production of expert reports, government filings, and client presentations; (e) ensuring the quality of all work product; and (f) providing administrative support. For more information and to apply, visit: The Tunnel.

Bank of America, Global Risk Analyst Program

The Quantitative Analytics program, as part of the Risk organization focuses on the application of quantitative methods to solve complex business challenges. You will gain real, in-depth experience and be provided micro and macro views of risk management for the bank. Responsibilities include developing emerging risk assessments, credit risk scenario analysis, as well as modeling in regards to some of the key risk factors, research and analysis to provide a micro view of risk management in a particular business line and a macro view of risk management, and assessing market trends and providing quantitative data for internal partners and clients. For more information and to apply, visit: The Tunnel.

Problems of the Fortnight

This will be the last set of Problems of the Fortnight for 2018, so please feel free to submit solutions to me any time before Winter Term begins in order to be acknowledged in the *Gazette*. I will also still accept solutions to the problems from the last issue, which was only a week ago.

(1) Suppose f is a continuous nonnegative real-valued function defined on $(0, 1)$ with $\int_0^1 f(x)dx = 1$. What are all possible values of $\int_0^1 (f(x))^{1/2}dx$?

(2) Compute the value of $\sum_{j=1}^{\infty}\sum_{k=1}^{\infty} \frac{1}{j2^j(j2^j + k2^k)}$.

Next term I will not be in charge of writing this column, so I bid you adios for now! Thanks for your attention and interest in the problems.

-Mike Cohen

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