

Georgia College of Sciences

rontiers in Science Lecture

## **Lance Fortnow**

Computer Science in Six-Tenths of a Second

What Happens After Hitting ENTER in a Google Search

April 19, 2018, 7:30-8:30 PM Room 152 Clough Undergraduate Learning Commons 266 4th St. NW, Atlanta, GA 30313

> CREATING THE NEXT®

What is computer science? Ask Google or Alexa, and you'll get an answer like "the study of the principles and use of computers." That doesn't really capture the breadth of the field.

But how can you get an answer in a fraction of a second? Now that's computer science!

Lance Fortnow will explore
the ideas developed by computer
scientists that transport your
Google query to the cloud,
how the cloud keeps track of the
massive amount of information
needed to answer the question,
how algorithms and machine
learning figure out what your
question means, and how best to
respond.

All these take place in that sixtenths of a second from the time you make the query until answers magically appear, while keeping your information secure and private all the time.

## **About the Speaker**

Lance Fortnow is professor and chair of the School of Computer Science in the College of Computing. His research focuses on computational complexity and its applications to economic theory.

Fortnow has written the popular science book "The Golden Ticket: P, NP, and the Search for the

Impossible."

Book signing follows the lecture.

