How the Stock Market is a Cryptography Problem (and no, this isn't about cryptocurrency)

Thursday, January 26
2:00pm - 3:00pm
3725 BBB

ABSTRACT: In this talk, I'll explain the path I took from academic cryptography to (accidentally) having a career in finance, and how it has positioned me to work openly on research problems that are otherwise hidden from public scrutiny. I'll compare the state of cryptography and finance research as disciplines, and discuss what such comparisons can teach us about scientific processes and markets. I'll also talk about some open research problems in finance that are well-suited to be tackled by computer scientists.

SPEAKER BIO: Allison Bishop is the President and co-founder of Proof Trading, a startup agency broker-dealer for US equities. She is also a part-time visiting professor of computer science at City College, CUNY. She serves as Vice President of the International Association for Cryptologic Research (IACR), and is the creator of CFAIL, an annual conference for failed approaches and insightful losses in cryptology. She was formerly a quantitative researcher at IEX, and an assistant professor of computer science at Columbia University. She holds a PhD in computer science from the University of Texas at Austin, a master's in mathematics from the University of Cambridge, and a bachelor's in mathematics from Princeton University. Her areas of expertise include trading algorithm design, market microstructure, cryptography, and distributed systems. She is also a stand-up comic, and was named the “fourth funniest person in finance” by Gotham Comedy Club.