Talk Math 2 Me

(A mathematics seminar for students and by students)

Undergraduate Computer Science Major,

Marco Tagliani will speak on:

The Never-Halting Genius of Alan Turing

Friday November 18, 2022
DERR 113
12:00pm-1:00pm

Abstract

Is there an algorithm that can decide whether a computer program halts on a particular input or runs forever? This is the question that English mathematician Alan Turing answered in 1937, in his seminal paper "On Computable Numbers, with an Application to the Entscheidungsproblem". The title might make little sense (for now!), but this paper is the reason that the Nobel Prize of Computing is named “Turing Award”. In this talk, we will go over the origins of the question, when “algorithm” and “computer” were still not well-defined concepts. More than a history lesson, the goal will be to explore how Turing set out to tackle such a monumental task. We will also explore what methods he used to construct one of the most beautiful and elegant proofs in all of Mathematics. The only prerequisite is basic set theory.

For details about Talk Math 2 Me, email Ellen Couvillion (ebr21@txstate.edu) or visit: