

Technological Singularity: Probability VS Assumption

New Mexico

Supercomputing Challenge

Final Report

April 5 2017

SanJuan-2

San Juan College High School

Team Member:

John Patrick Abergos

Johndenmyr Mendoza

Fillipp Salvador

Teacher:

Geizi Llanes

Project Mentors:

Geizi Llanes

Adnan Bashir

Harris Drake

Cameron Cooper

Project Summary:

The technological singularity, a highly debated topic, is the point in time that technological computational capability reaches that of the human brain. Our purpose in our project is to make a reasonable estimation of when the technological singularity will occur. In order to determine the date of the technological singularity, we have created two similar programs that will simulate the advancement of human intelligence alongside artificial intelligence. The moment in time that they intersect is the hypothetical technological singularity. Before we began programming, we conducted research on the trend of advancement of both machines and humans. Moore's law states that the amount of transistors within a machines doubles every two years. According to this law, the processing capability of new machines will be twice the amount of its predecessor. The growth of machines is exponential, while the growth of human intelligence is linear. Humans are only capable of learning so many things before they die, so the growth of human intelligence is linear. We have calculated a reasonable estimate of how much human intelligence grows every year until their death, and we have incorporated that into our program.

Problem Statement

When will the technological singularity occur, the point in time where technological computational capabilities equal that of the human brain?

Description of Method

We have created two programs that will simulate the growth of artificial intelligence and human intelligence. Simulating human intelligence is more difficult than simulating artificial intelligence. When simulating the growth of human intelligence, you have to take into account age