



**[Ai Seminar]**

# Bank Artificial Intelligence Seminar

A small seminar featuring a live Ai session, where  
a basic [Artificial Neural Network](#) was written from  
scratch & discussed, led by Cosmos Bennett

2020 to 2024

Code/video for a live recorded session of a basic neural network done by

Cosmos Bennett <https://www.youtube.com/watch?v=OhRkCb8XGj0>

Brain inspired computer code or smart apps, called **AGI** or **Artificial General Intelligence** (predicted to happen by [as soon as 2029 or sooner](#)), will perhaps one day be [mankind's last invention!](#) (Interested parties can see [MIT's AGI course here.](#))

For now though, AGI's predecessor, called **Artificial Narrow Intelligence**, also called **Artificial Intelligence**, can do amazing stuff like [diagnose diseases better than human doctors](#), enable [self driving cars](#), or [give game characters the ability to learn to navigate game environments without human aid!](#)

Crucially, [where Ai is already enhancing banking](#), fortunately [the Jamaican government has recognized the impact that artificial intelligence already brings, and what shall likely happen futureward.](#) I speak more about this in the gleaner articles found on the newspaper tab [on this experimental platform of mine.](#)

# Quick Overview of Seminar:

- 1.) All of successful artificial intelligence algorithms today perform something called [error minimization](#).



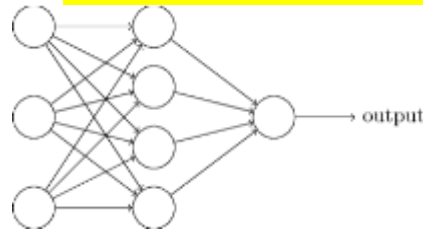
- 2.) They work **similar** to how biological brains work.



- 3.) For eg, with a **high error rate**, a child will first **wrongly** identify objects in the world in his/her earlier years of life.

3.b.) That error rate gets **smaller** or is minimized, as the child gets better at identifying objects in the world; in the early years, a parent can guide the child by saying this is a cat or this is a dog etc, i.e. the parent helps the child to **correctly label** objects in world.

3.c.) After a while, even without parental guidance, the child will be quite good at identifying objects, and his/her error rate at object identification would have been **minimized substantially**.



4.) Artificial Intelligence works in a similar way; for a particular task, they start out **terrible** with high error rates, then they get far better after being exposed to many instances of correctly labelled things, until they get to a point of doing the task well, even without being exposed to correctly labelled data.

#### **5.) Artificial neural networks power most smart apps today.**

**I spent about 2 hours to write a basic artificial neural network in java from scratch without using machine libraries/internet. (The aim was to try to guide SASS team along in writing a basic artificial neural network, as I wrote the code)**

This exercise was really geared towards preparing more Bank programmers to better apply machine learning libraries.

6.) Though optional, understanding basic neural nets (even a non-math heavy, but programmatic understanding instead) can afford the programmer better grasp of applying machine learning libraries such as **tensorflow** built by Google or **azure ml** by Microsoft or other ones by other parties like **the one I used to help code the artificial neural network based credit card fraud detection system demo here at National Commercial Bank**. (We **didn't** go through **the math behind basic neural nets**, but we went through a relatively simple live programming example instead.)

Regards,

Cosmos Bennett (author of the weekly Jamaican-newspaper Gleaner column: "[Artificial Intelligence and the economy](#)", and "[Why Jamaica needs a minister of Ai](#)"..., inventor of the "[Supersymmetric Artificial Neural Network](#)" and author of "[Artificial Neural Networks for kids](#)".