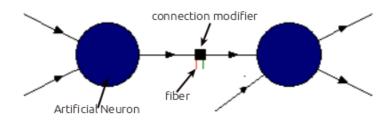
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## Contribution of Alan Turing in the field of Neural Network.

- Alan Turing (1912-1954) a mathematician
- Invented Turing machine to solve the decision problem and was interested in the ability of a machines to think.
- Wrote a blue print for the connectionist project as early as 1948, in the little known paper called "Intelligent Machinery"
- His paper contained modern connectionism i.e. computing with network of artificial neurons.
- In reality this far-sighted paper was the first manifesto of Artificial Intelligence, but sadly Turing never published it. In it he not only set out the fundamentals of connectionism but also brilliantly introduced many of the concepts that were later to become central in AI, in some cases after reinvention by others.

## Turing's B-Type Neural Network



- B-Type unorganized machine consists artificial neurons.
- B-Type machine may contain any no of neurons connected together in any pattern
- Neuron to neuron connection pass through the connection modifiers
- A-Type organized machine is simply a B-Type without any connection modifiers.
- A connection modifiers has two training fibers. And presence of these fibers helps b-Type unorganized machine to be trained, by means of what Turing called "Appropriate interference, mimicking education"
- Turing theorized that "The cortex of an infant is an unorganized machine, that can be organized by suitable interfering training"
- Before the term "genetic algorithm" was coined, Turing even proposed the use of what he called genetical search to configure his unorganized machine.