HUDK 4051: LEARNING ANALYTICS: PROCESS & THEORY

3/1/17 8:59 PM

In the news

Online Ed's Return on Investment

INSIDE HIGHER ED

MOTHERBOARD

Internet of Things Teddy Bear Leaked 2 Million Parent and Kids Message Recordings

The Ed Tech Landscape in 2017

TECH.CO

4 Edtech Trends to Watch Out For in 2017

EdTech

Nearpod, A Pioneer of VR in Edtech, Raises $21M

nearpod VR

Advanced Batteries Poised to Power Up Higher Education IoT

NIBLETZ

New York City Will Be Asked to Release More Data on Students

The New York Times

EDWEEK Market Brief

Visuals Play a Key Role in Ed-Tech Learning Products

If You're Serious About Designing Edtech Solutions, Start With the Learners

EdSurge News

What Students Want Their Professors to Know About Edtech

MOODLE NEWS

Does 'Freemium' Still Work In EdTech And Moodle-Based Businesses?

IMPACTALPHA

INVESTMENT NEWS FOR A SUSTAINABLE EDGE

Does for-profit edtech serve the students that need it most?

Students' worry: education technology might predict failure before they have a chance to succeed

THE HECHINGER REPORT

Helping Teachers Surface and Address Bias with Online Practice Spaces

EDUCATION WEEK

Report: Data Should Be Used to Drive Improvement in Schools, Not Punish Failure

THE JOURNAL

The Leadership Conference

Civil Rights Groups Speak to Importance of Education Civil Rights Data Collection

Events

- Learning Analytics Seminar Series, March 9 Andrew Gibson Writing Analytics (http://laseries.pressible.org/)
- NYC School of Data 2017, March 4 (https://www.eventbrite.com/e/nyc-school-of-data-2017-tickets-32191968043)
- 2017 Art+Feminism Wikipedia Edit-a-thon, March 11 (https://www.eventbrite.com/e/2017-artfeminism-wikipedia-edit-a-thon-tickets-31462938496)
- 2017 Tri-State Education Career Fair, March 4 (Cowin Conference Center. Students should register on TCCS LINK)

Tri-State Education Career Fair on ***Saturday, March 4 from 11am -3pm in the Cowin Conference Center.***

Mid-Semester “Exam”

- Two parts
- Part 1: in class, open book (computer), due in class
- Part 2: take home, due within 5 days, open ended
- Formative not summative test
- Must be completed within time frame

Activity

- Create three rows of chairs

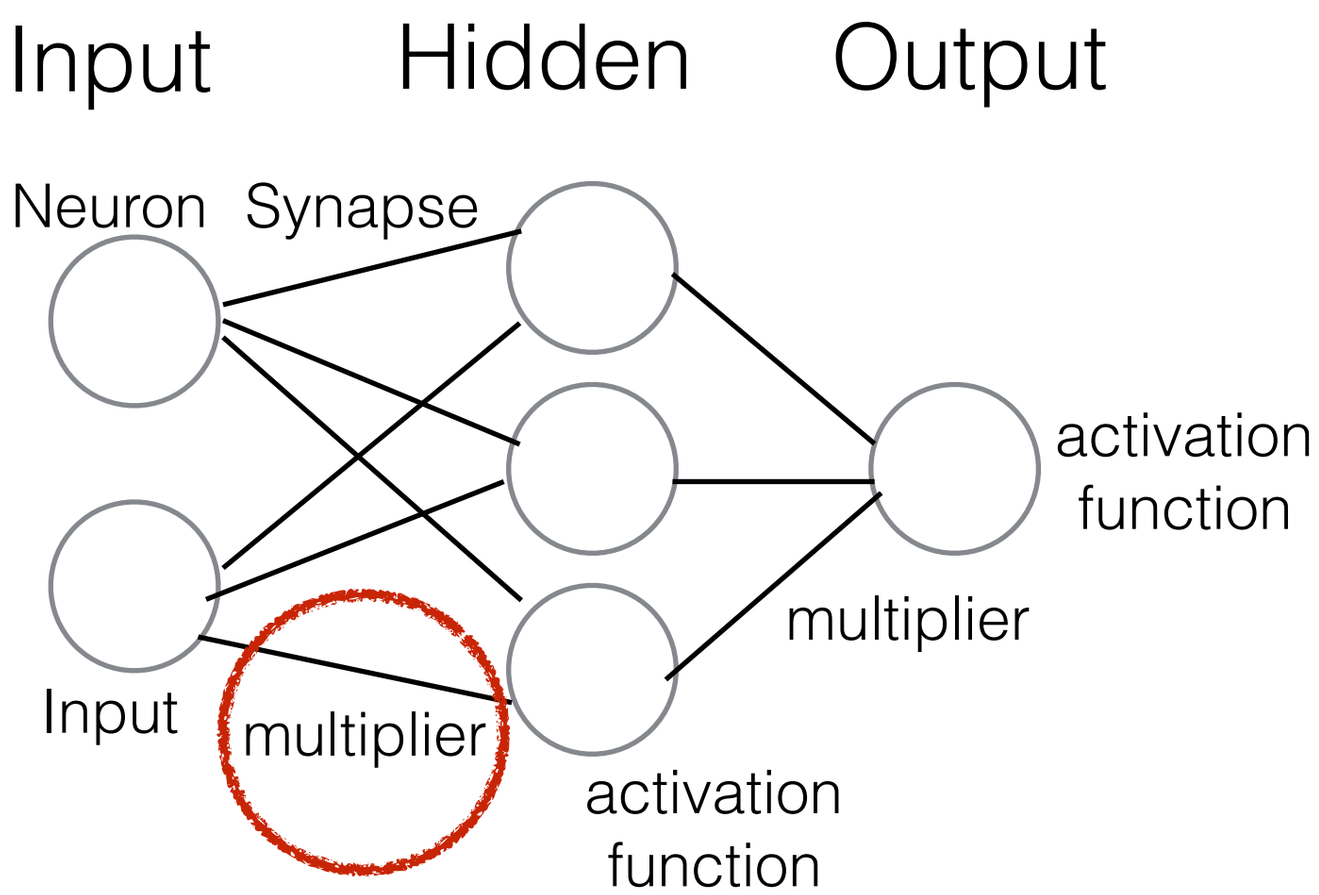
- One facing forward, two facing backward

Neural Networks

Three Ideas

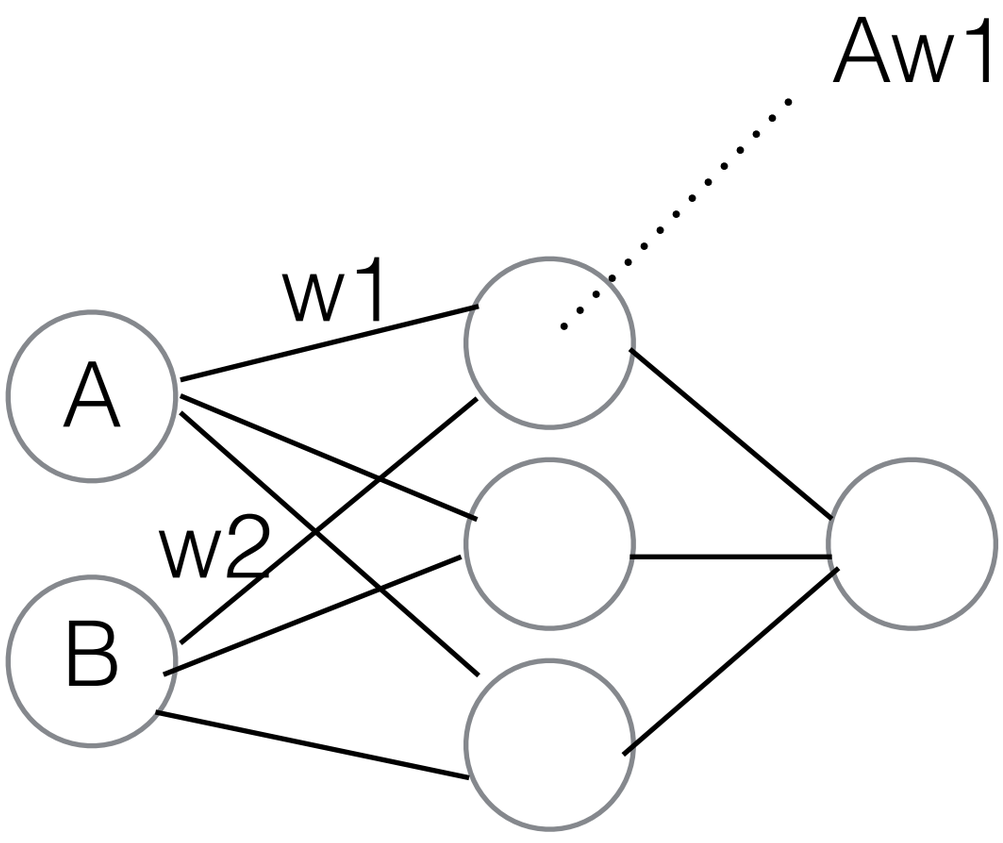
- Structure
- Forward Propagation
- Back Propagation

Structure



- based on biological neurons

Forward Propagation



Aw1 + Bw2

Activation function
(threshold)

- Computation of weights

Back Propagation

- Error calculation and cost function - gradient descent
- Gradient descent for each synapse is calculated
- And each synapse is individually re-caluclated
- Try again