



## **Week 1 Assignment**

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EAI6080: Advanced Analytical Utilization

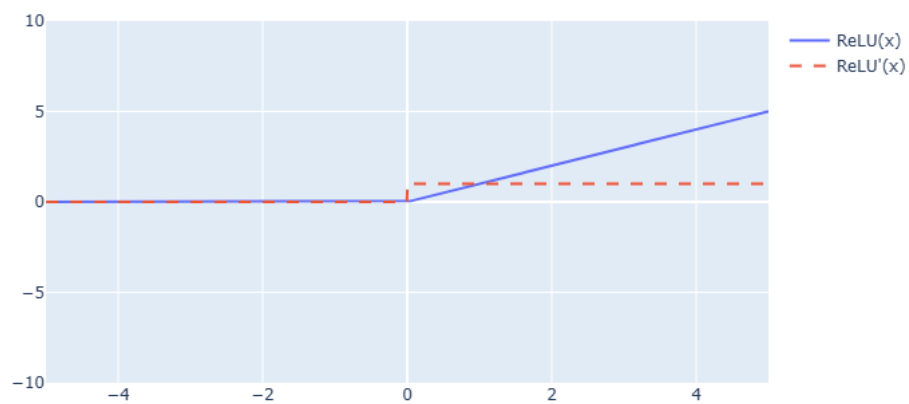
Instructor: Mimoza Dimodugno PhD

Sep 26th, 2025

## Activation Functions

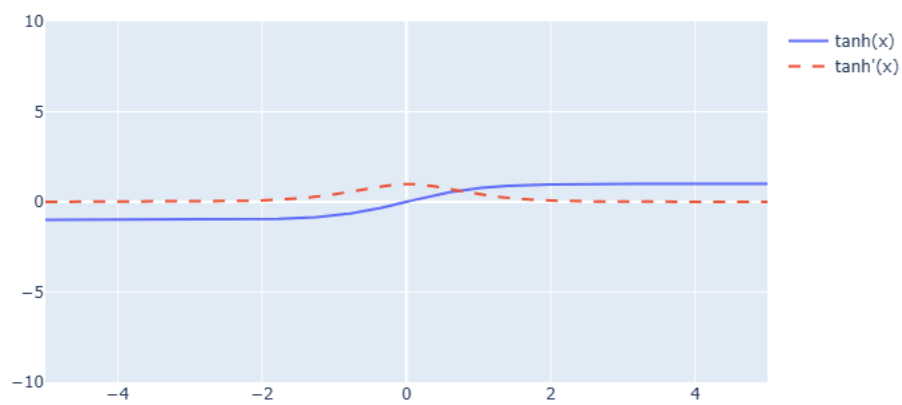
### 1. ReLU

ReLU and derivative

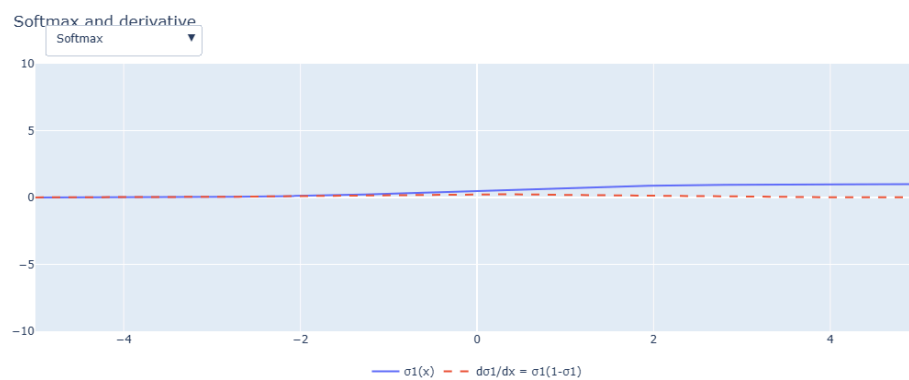


### 2. Tanh

Tanh and derivative

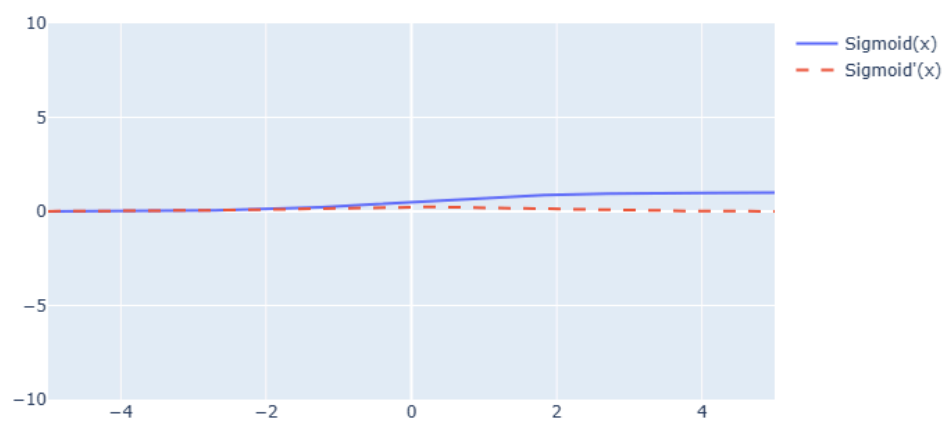


### 3. Softmax



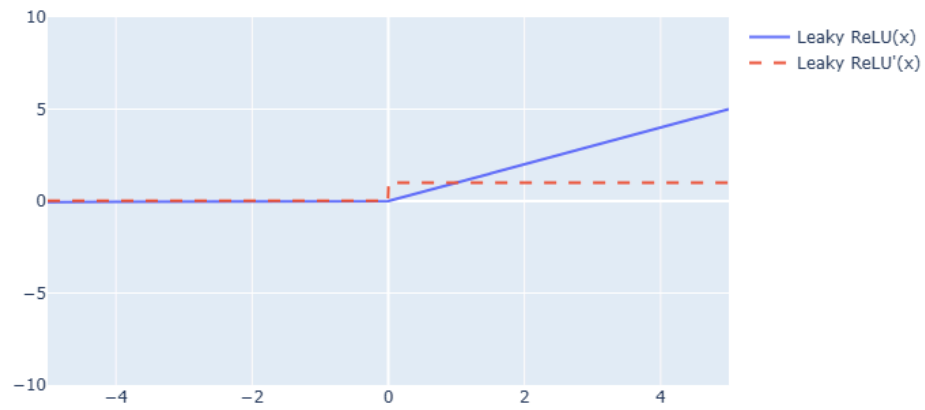
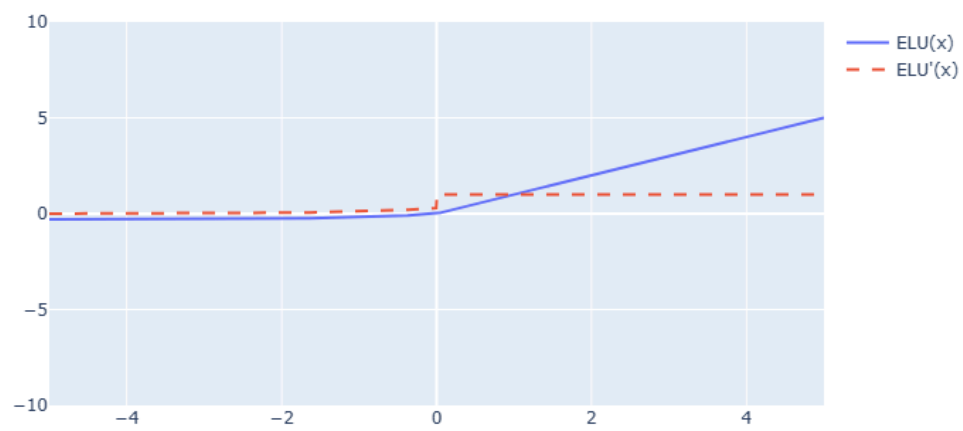
#### 4. Sigmoid

Sigmoid and derivative



#### 5. Leaky ReLU

Leaky ReLU and derivative

6. ELU (plot with  $\alpha=0.3$ )ELU and derivative ( $\alpha=0.3$ )

## 7. Sinc

Sinc and derivative

