# artificial intelligence, let's talk about math and statistics!

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**Raspberry Pi Pico** \* 133 MHZ \* 264 KB RAM \* 2 MB FLASH

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480 Stück "Kleiner Supercomputer"

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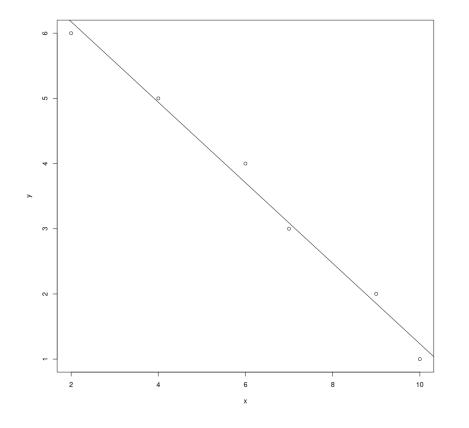
480 Stück "Kleiner Supercomputer"



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### KLASSISCHE STATISTIK



| У | ~ | X  |
|---|---|----|
| 1 |   | 10 |
| 2 |   | 9  |
| 3 |   | 7  |
| 4 |   | 6  |
| 5 |   | 4  |
| 6 |   | 2  |

#### **Lineare Regression** $Y \sim a + b * X$

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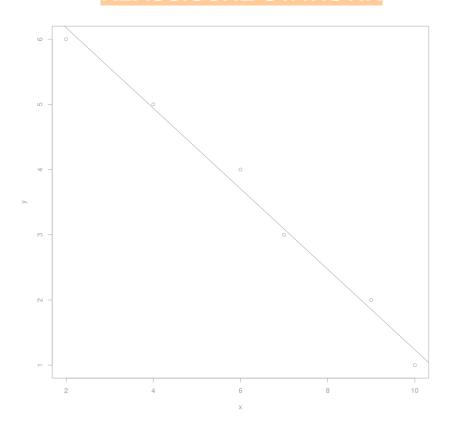
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### **NEURONALES NETZ**

#### 1.000 x Würfeln

Wobei es theoretisch möglich sein muss, dass bei einer Stunde Lernaufwand alle Noten von 1 bis 6 realisierbar sind!



Lineare Regression Y ~ a + b \* X

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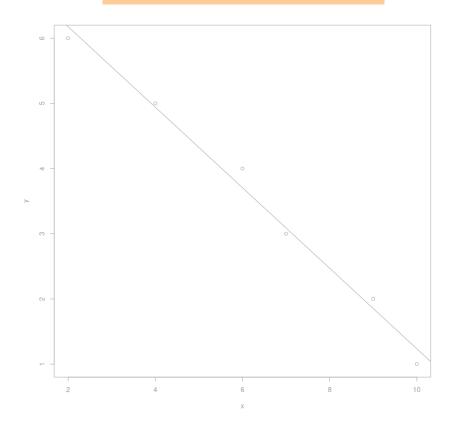
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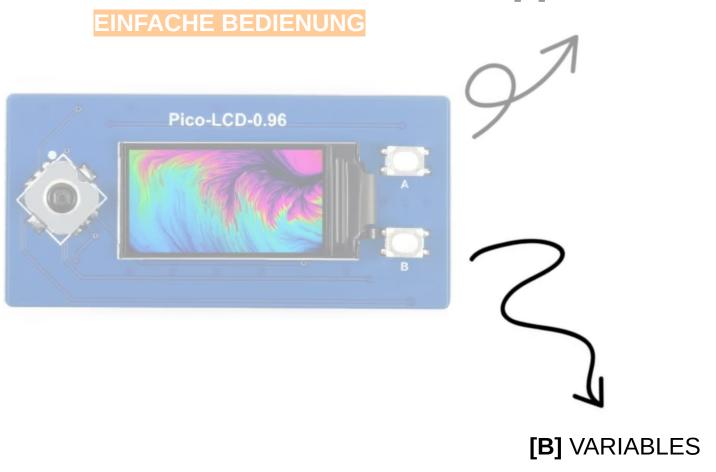
[A] PREDICTIONS





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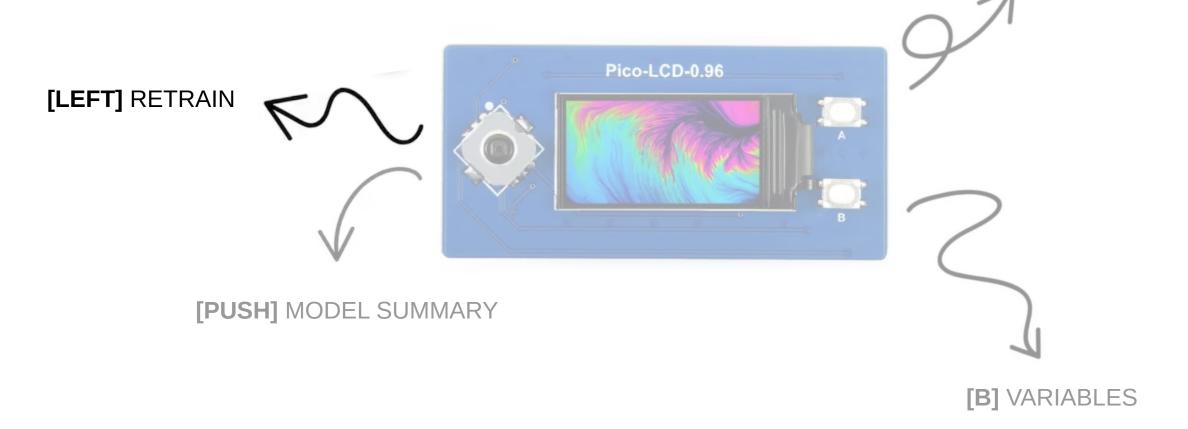
[A] PREDICTIONS

[B] VARIABLES



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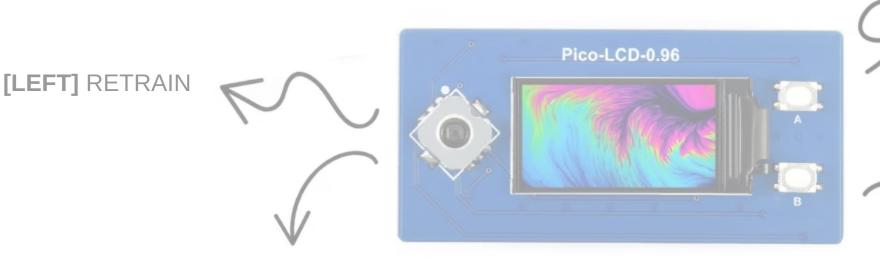


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[A] PREDICTIONS

### EINFACHE BEDIENUNG



### TRAINING / VALIDIERUNG

[PUSH] MODEL SUMMARY

Epochen: 995

MSE - Verlustfunktion:0.03447995

Epochen:996

MSE - Verlustfunktion:0.03447811

Epochen:997

MSE - Verlustfunktion:0.03447633

Epochen:998

MSE - Verlustfunktion:0.03447462

Epochen:999

MSE - Verlustfunktion:0.03447282

Epochen: 1000

Intercept: 7.380255

Regressionsgewicht: -0.6134467

Geschätzte Werte: [1.245845, 1.859269, 3.086116, 3.69954, 4.926387, 6.153234]

Gerundete Werte:['1', '2', '3', '4', '5', '6']

Tatsächliche Werte:[1, 2, 3, 4, 5, 6]

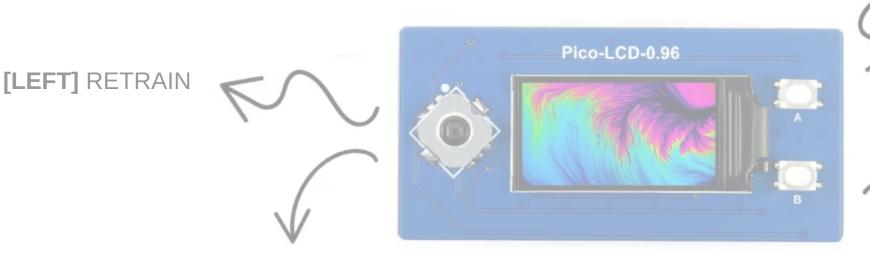
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