

Software:



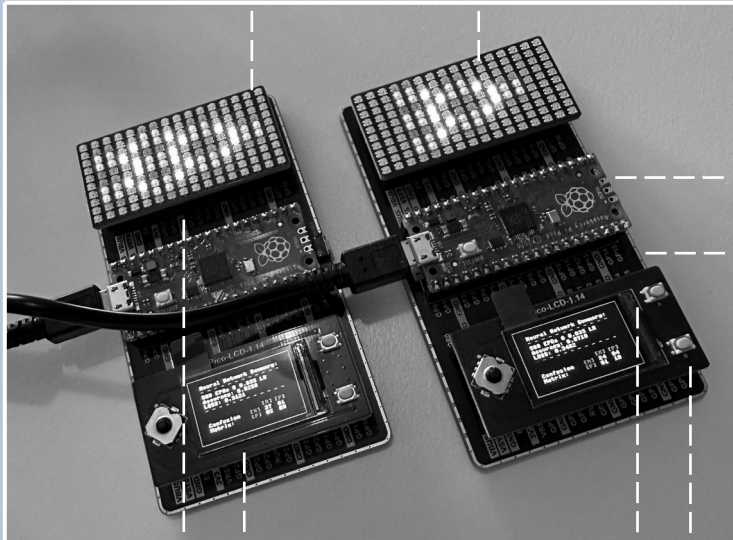
OPEN  
SOURCE

# AI-ANNE

A NEURAL NET FOR EXPLORATION

8 Neurons @ 4 Layer

6 Neurons @ 3 Layer



## ARTIFICIAL NEURAL NETS

Raspberry Pi Pico

Dual GPIO Expander

Raspberry Pi Pico plus Hardware:

Dual GPIO Expander (SKU 19343)

1.14 Pico LCD Display (SKU 19340)

16 x 10 LED Matrix (SKU 20170)

LED Matrix

LCD Display

A

B

## MICRO PYTHON

## EFFICIENT & EXPLAINABLE

Basic Mode of Operation:

Flexible **Pre-Training** with TensorFlow & Keras  
Simply create Neural Nets in **MicroPython**  
Transfer the **Parameters** to a Microcontroller  
Selection of suitable **Activation Functions**:  
Softmax, ReLU, Leaky ReLU, Tanh, Sigmoid

Transparency and Control:

Insights into the functioning of **Neural Nets**  
**Efficient Algorithms** & energy-saving Hardware  
Realtime Processing & **Protection of Sensitive Data**  
Manual **Fine Tuning** directly on the Microcontroller  
Simple Hardware and Software Setup with **Thonny**

Version 2.0

## FROM AGE 16+



KiNRW

Lernende  
Systeme  
DIE PLATTFORM FÜR KÜNSTLICHE INTELLIGENZ