Software:



**OPEN SOURCE** 

## AI-ANNE

(A) (N) EURAL (N) ET FOR (E) XPLORATION

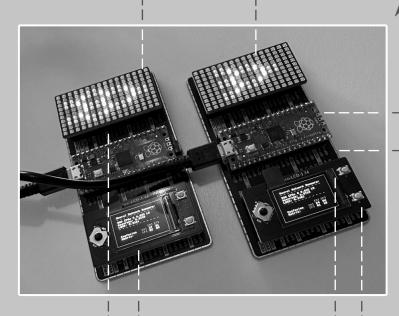
8 Neurons @ 4 Layer

6 Neurons @ 3 Layer



Raspberry Pi Pico

**Dual GPIO Expander** 



**LED Matrix** 

**LCD Display** 

Raspberry Pi Pico **plus Hardware**:

Dual GPIO Expander (SKU 19343) 1.14 Pico LCD Display (SKU 19340) 16 x 10 LED Matrix (SKU 20170)

**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

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

FROM AGE 16+



www.statistical-thinking.de Prof. Dr. habil. Dennis Klinkhammer



