

Count me if you can

Or, how well does ChatGPT count?

(Count GPT on github)

Stephen Witty
switty@level500.com
GitHub: level500.com
870-688-5220

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Project Goal

Play with GPT Vision API

Measure how well GPT can count things in an image

Irritate my wife by spreading electronics across the kitchen table



ChatGPT

Methodology

Randomly turn on LEDs, take picture, ask Vision GPT to count the lit LEDs

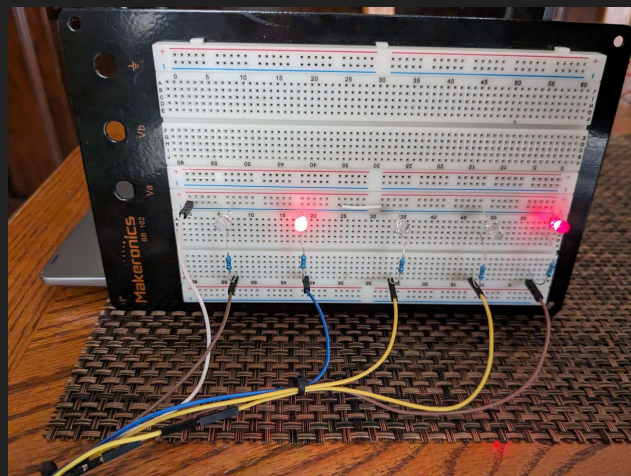
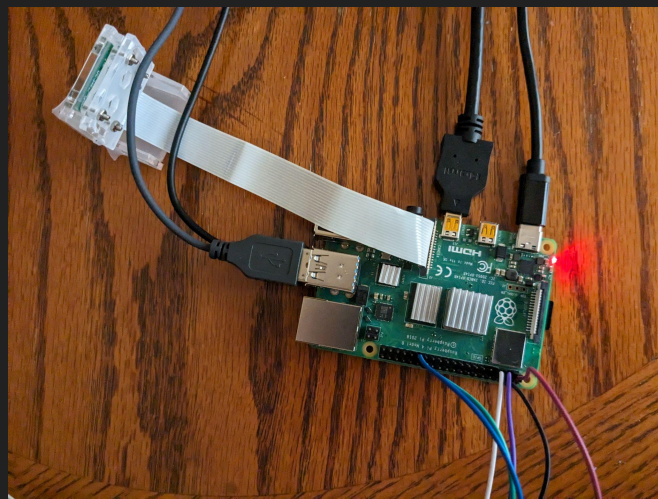
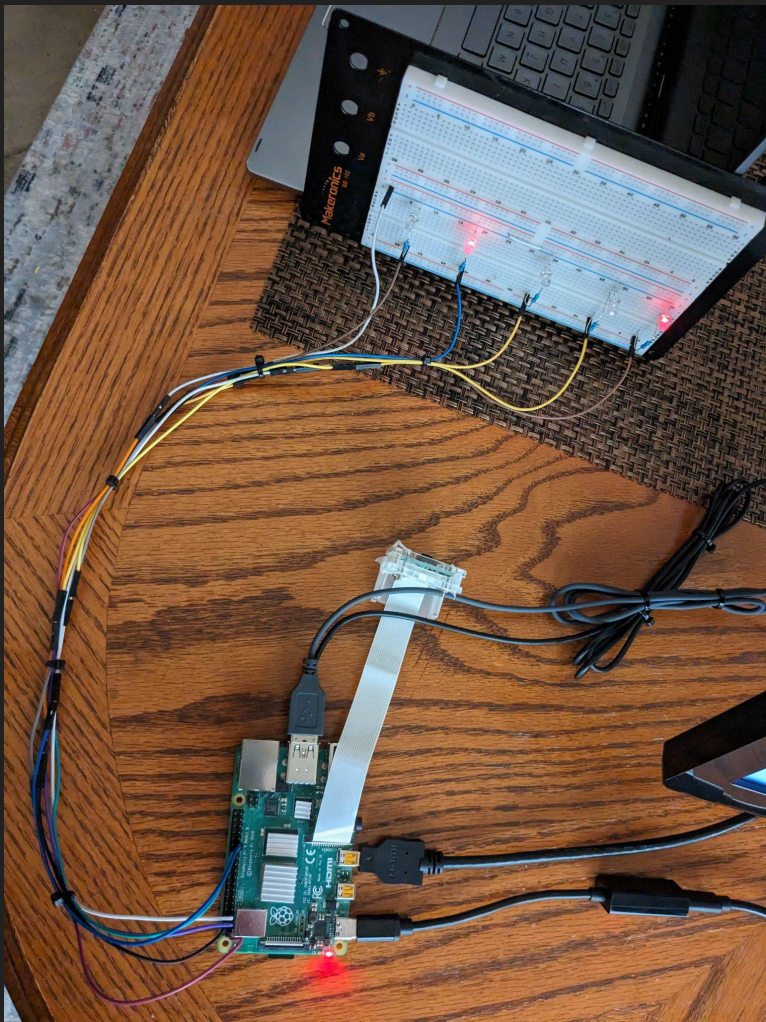
Use a Raspberry PI 4 with added camera and LEDs controlled with GPIO pins

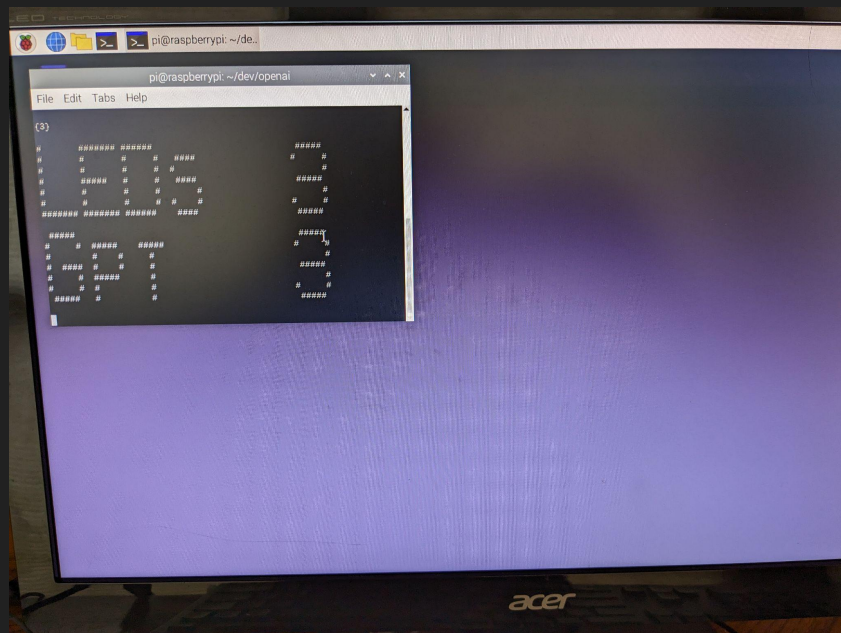
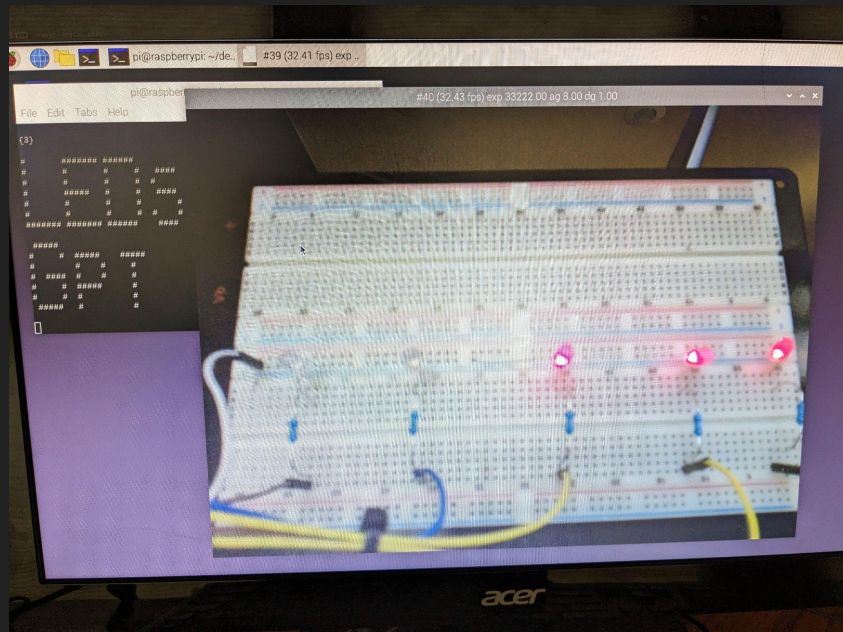
The program randomly turns on up to 5 red LEDs

The number of lit LEDs are compared to GPT's number of LEDs answer

Stats are kept from several runs and reported

Process is automatic and Python program controlled





Results / Observations

GPT Vision is rate limited to 100 prompts per day

After reaching 100, one is allowed every 15 minutes

This limits current research

The Pi camera (or my usage) provides a low quality photo

The program always lights at least one LED (All off was not tested)

Test run of 30: 28 right answers, 1 wrong answer, 1 web API error