

Arduino et al.

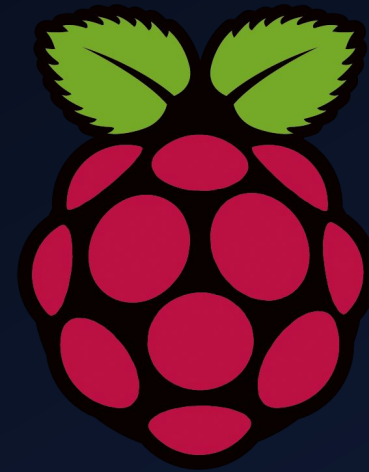
Microcontrollers for absolute beginners

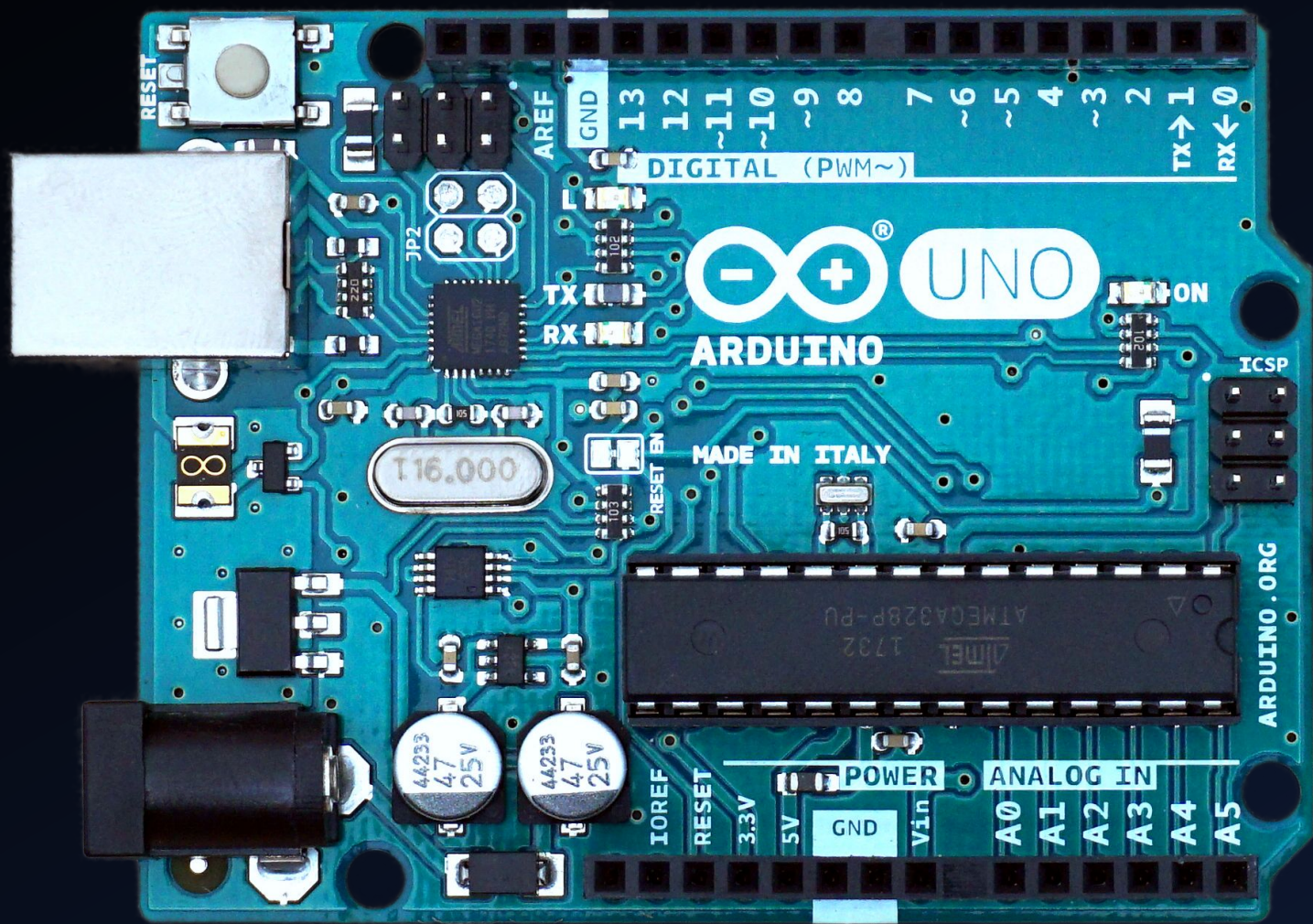
Microcontroller \neq Single-Board-Computer

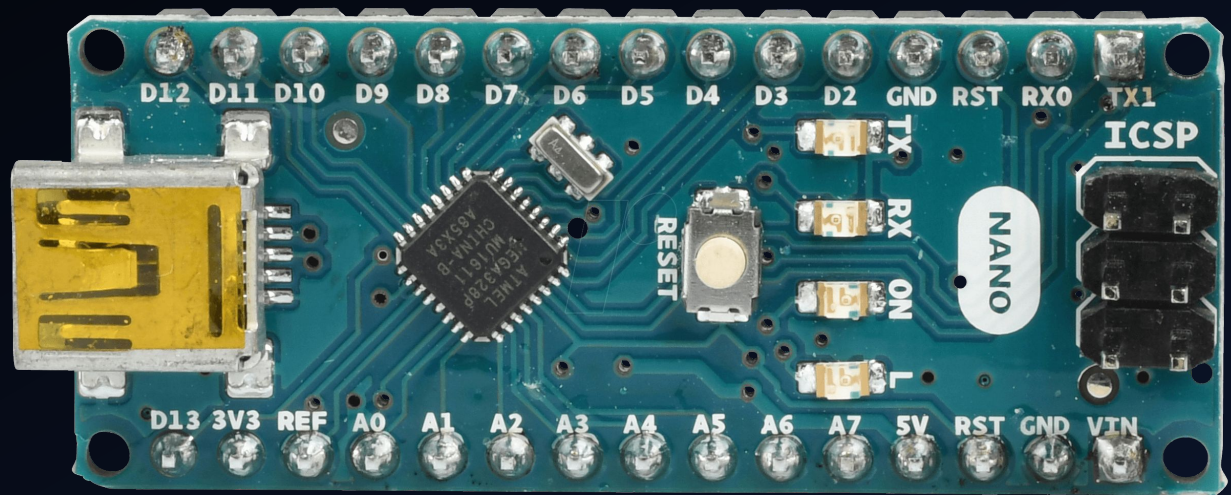
Need a device for
“simple” and
repetitive tasks?



Need a small but
full fledged
computer?

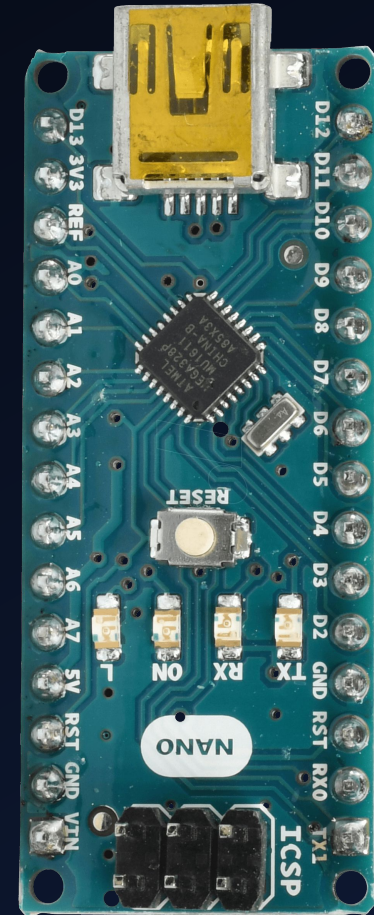






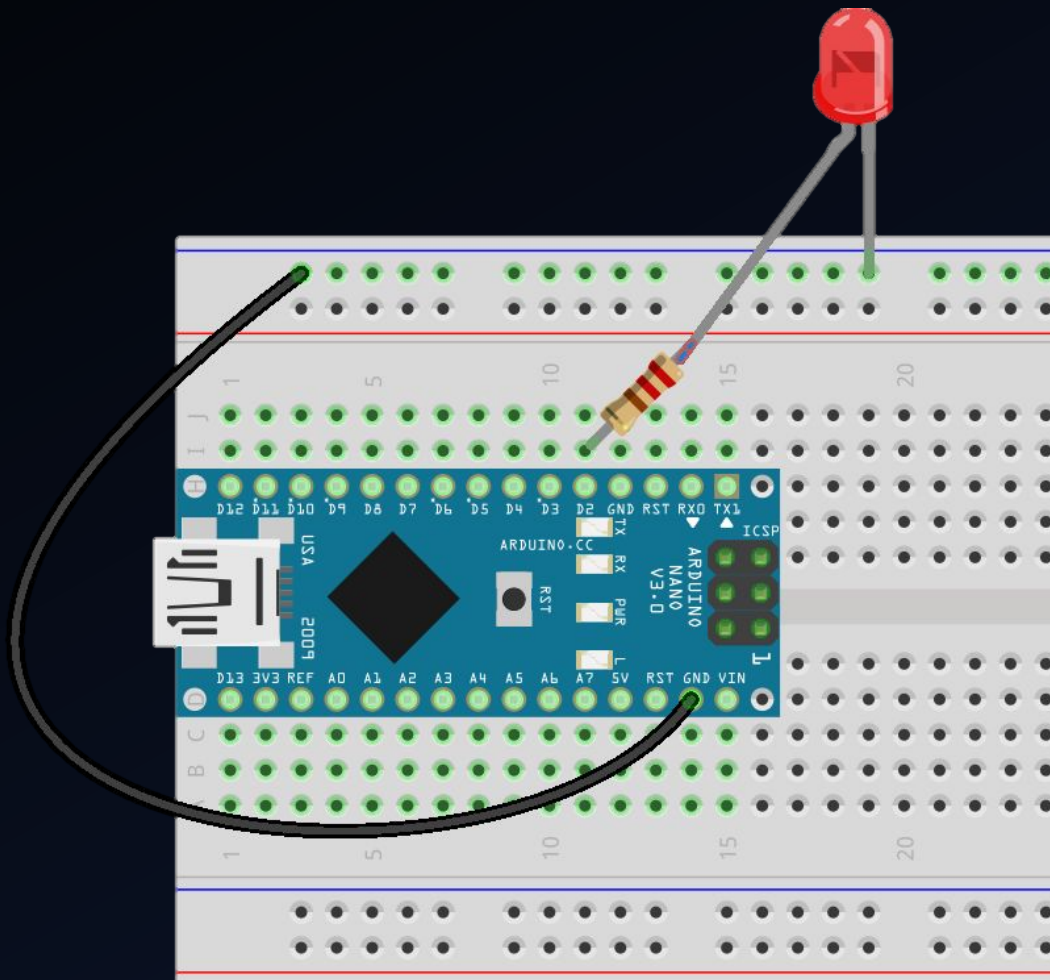
Technical data of the Uno/Nano

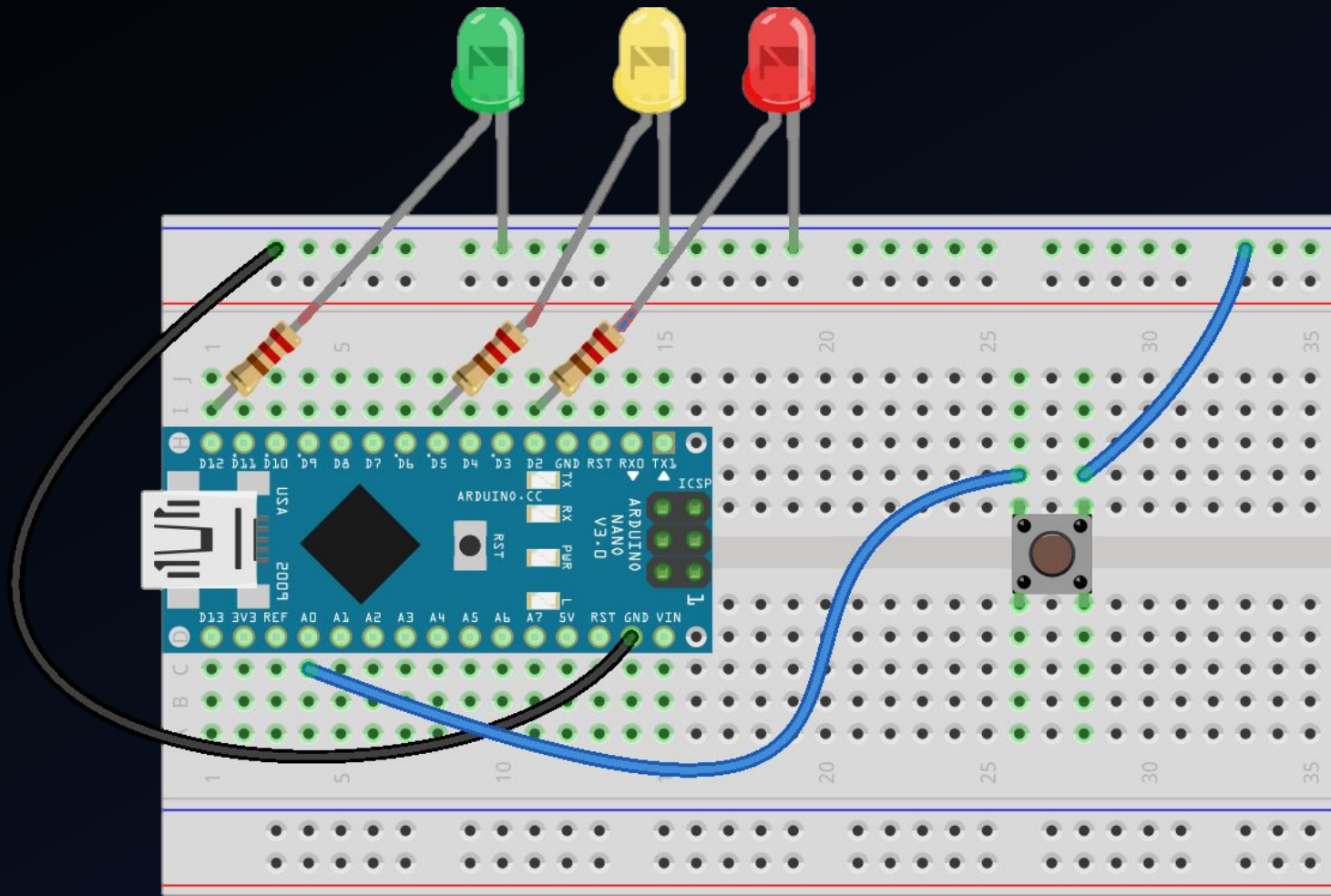
- 16 Mhz clock-speed
- 32 kB program storage
- 2 kB RAM (variable storage)
- 1 kB EEPROM (non volatile)
- 14 digital I/O pins
- 6 PWM pins
- 2 interrupt pins
- 8 analog I/O pins
- I2C / SPI capable

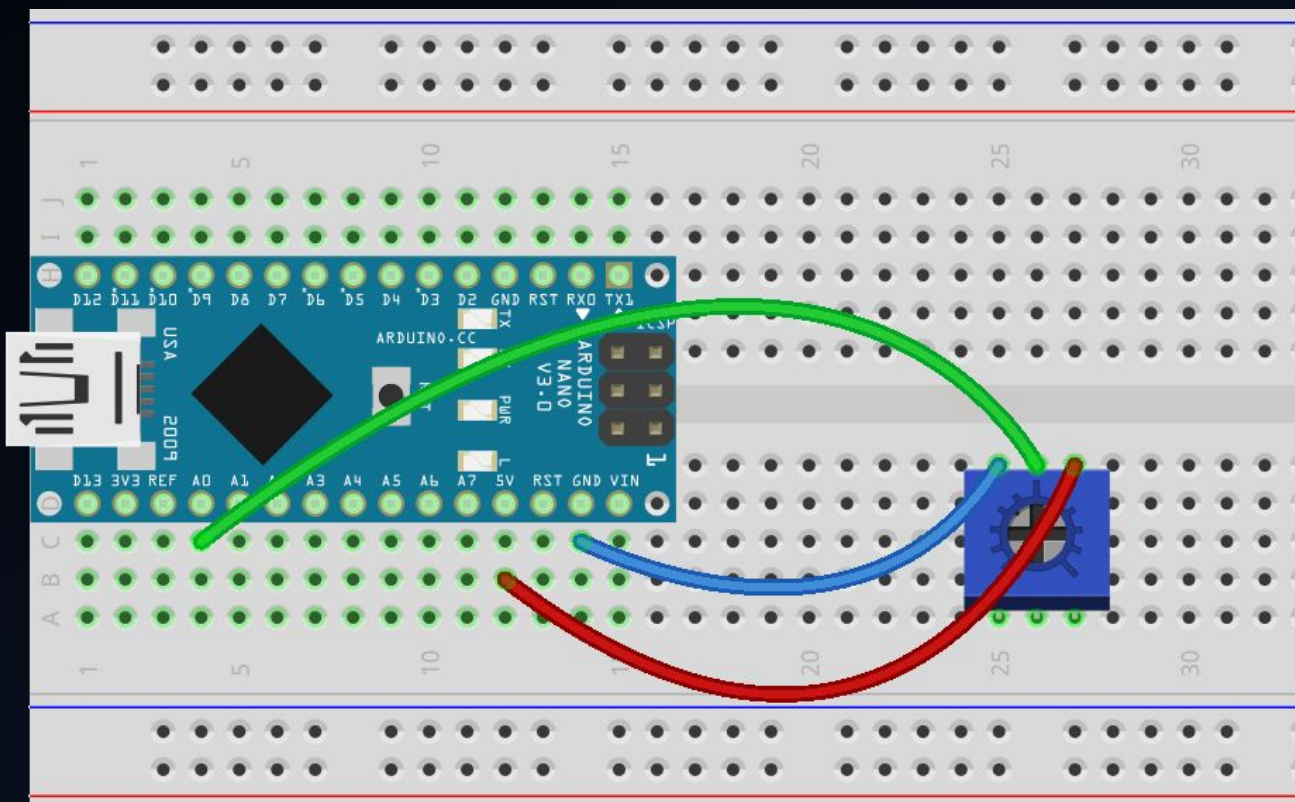


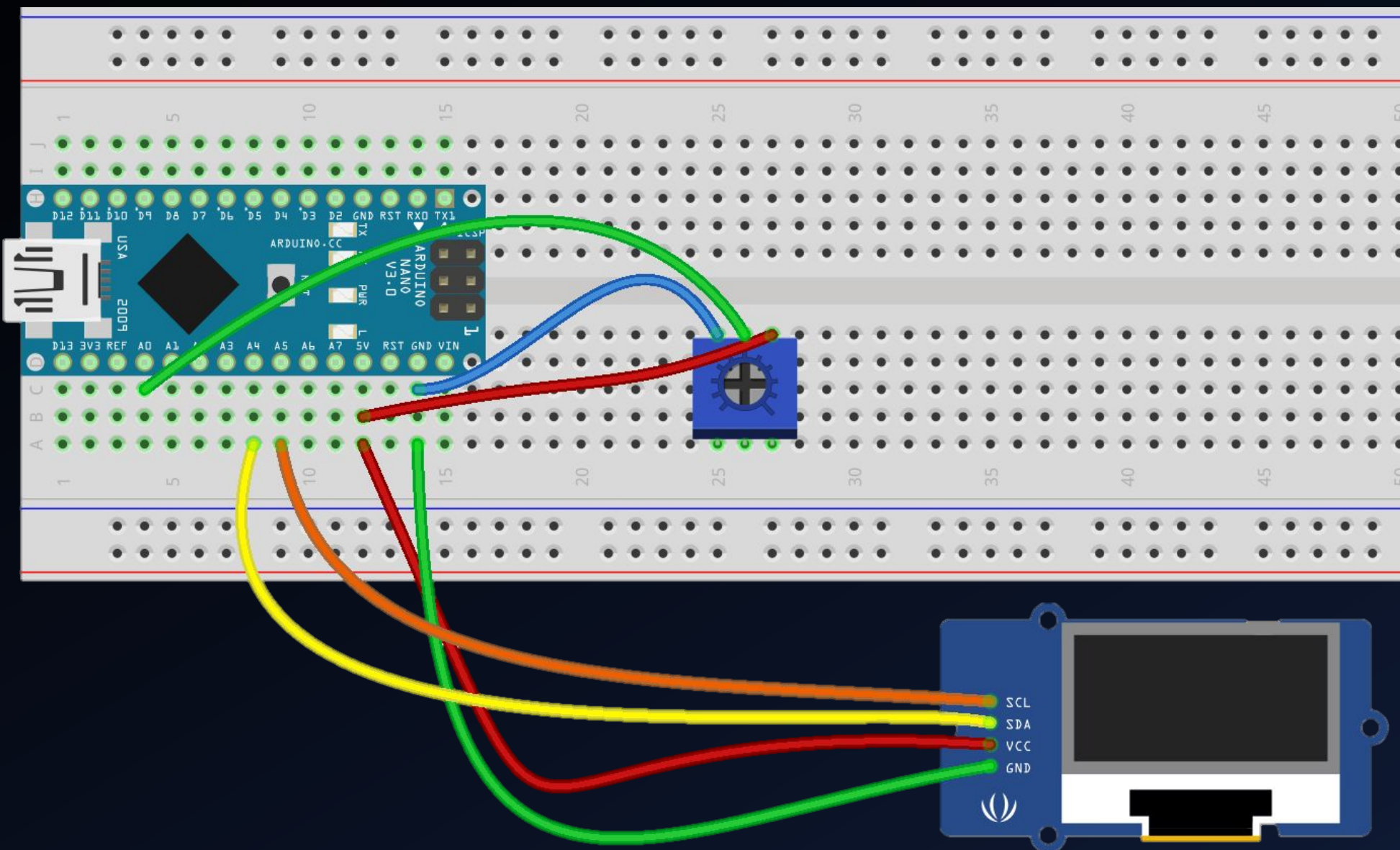
A few example projects

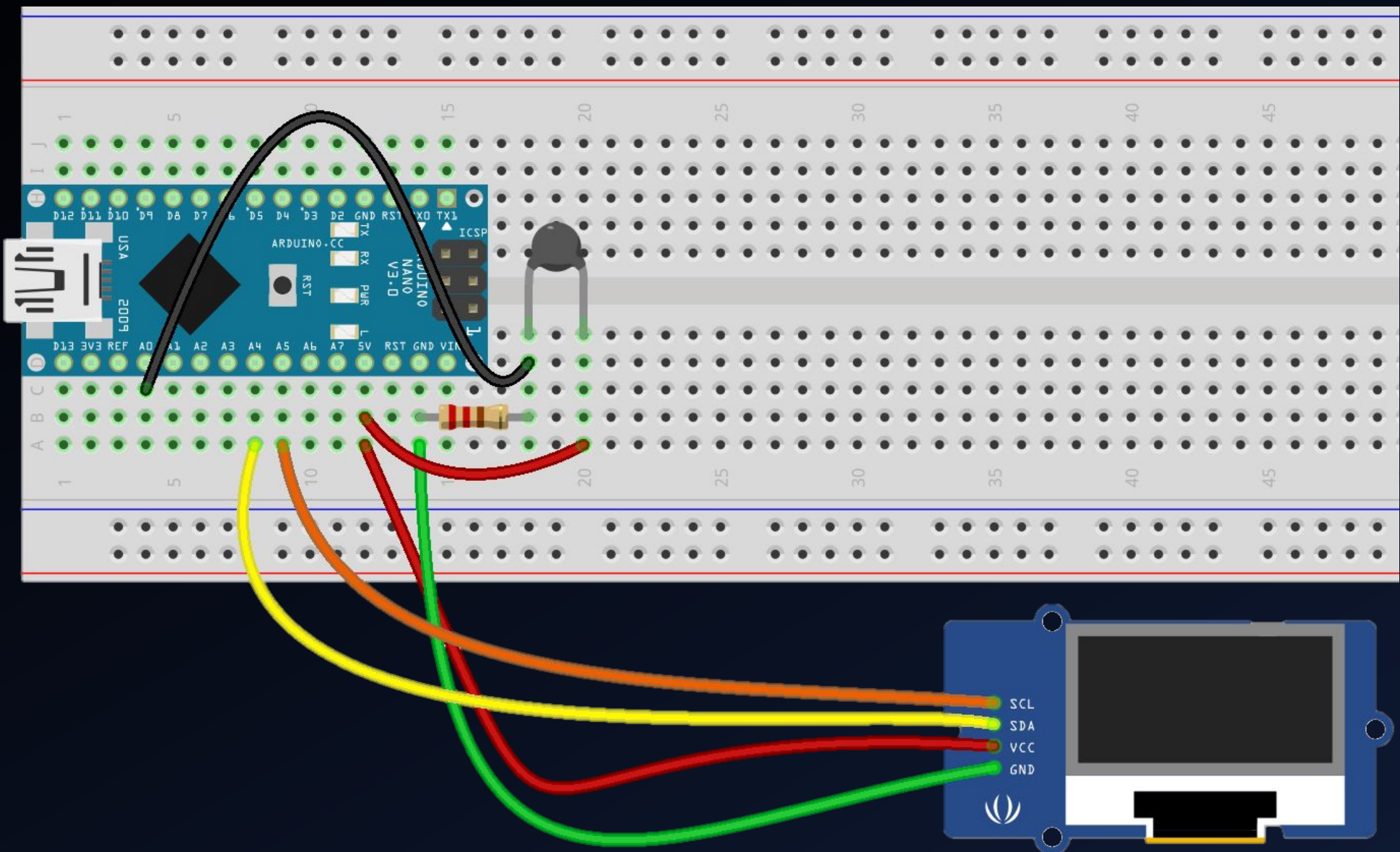
- Blinking internal LED
- Blinking external LED
- Traffic light
- Serial monitor
- OLED Display (I2C)
- Sensors
- Electromechanics (Stepper motor)

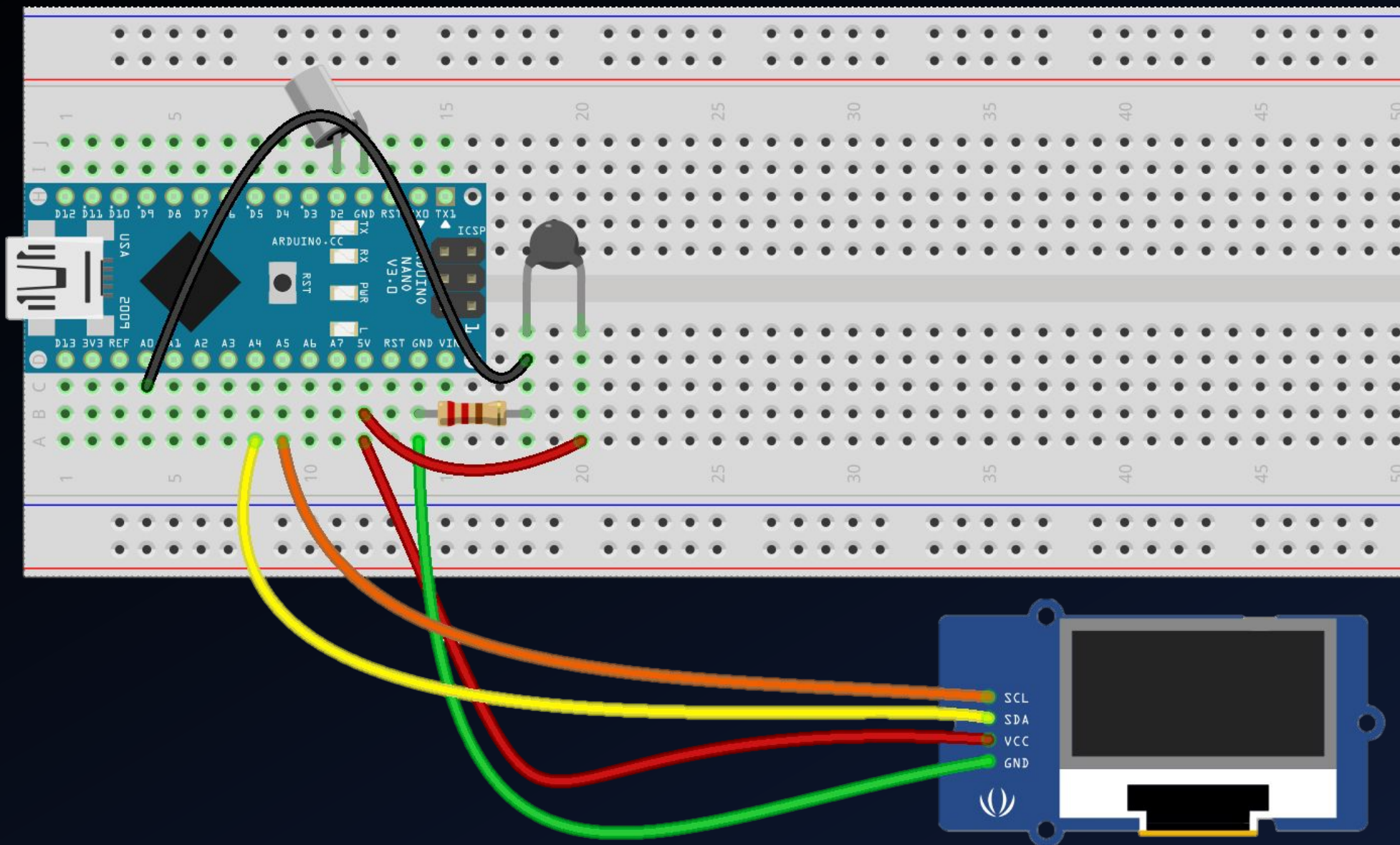


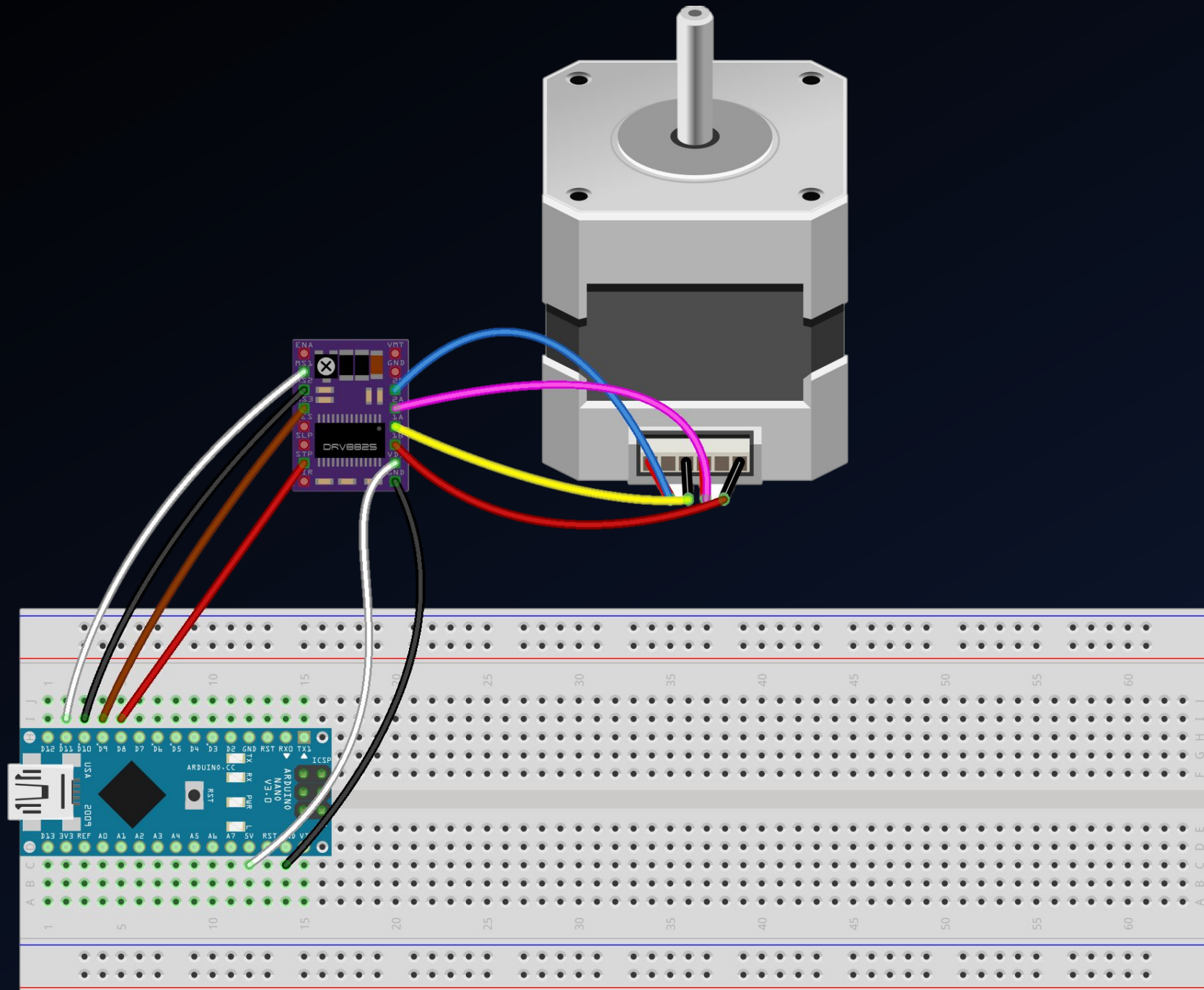












Now, why would you care?

- easy & cheap to get going
- steep learning curve
- “natural” problem/solution expressing

