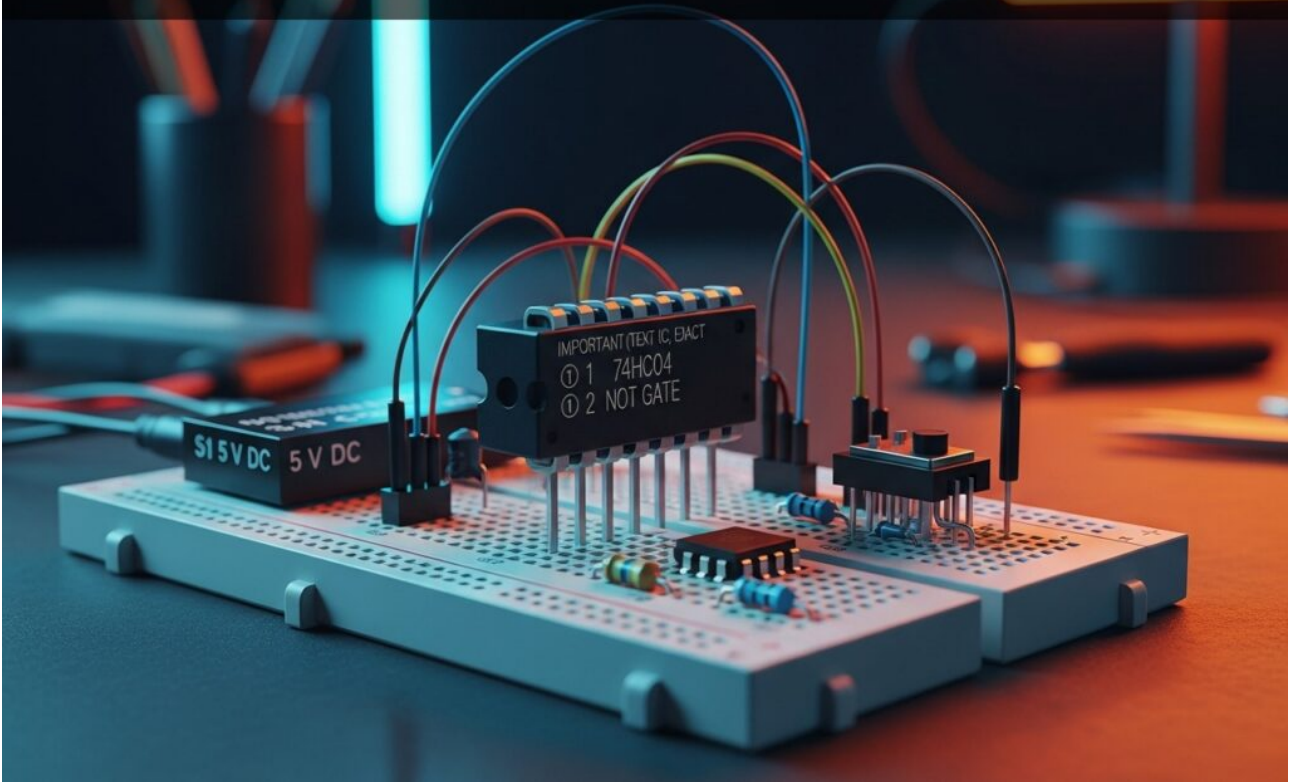


Practical case: Signal inverter with indicator LED

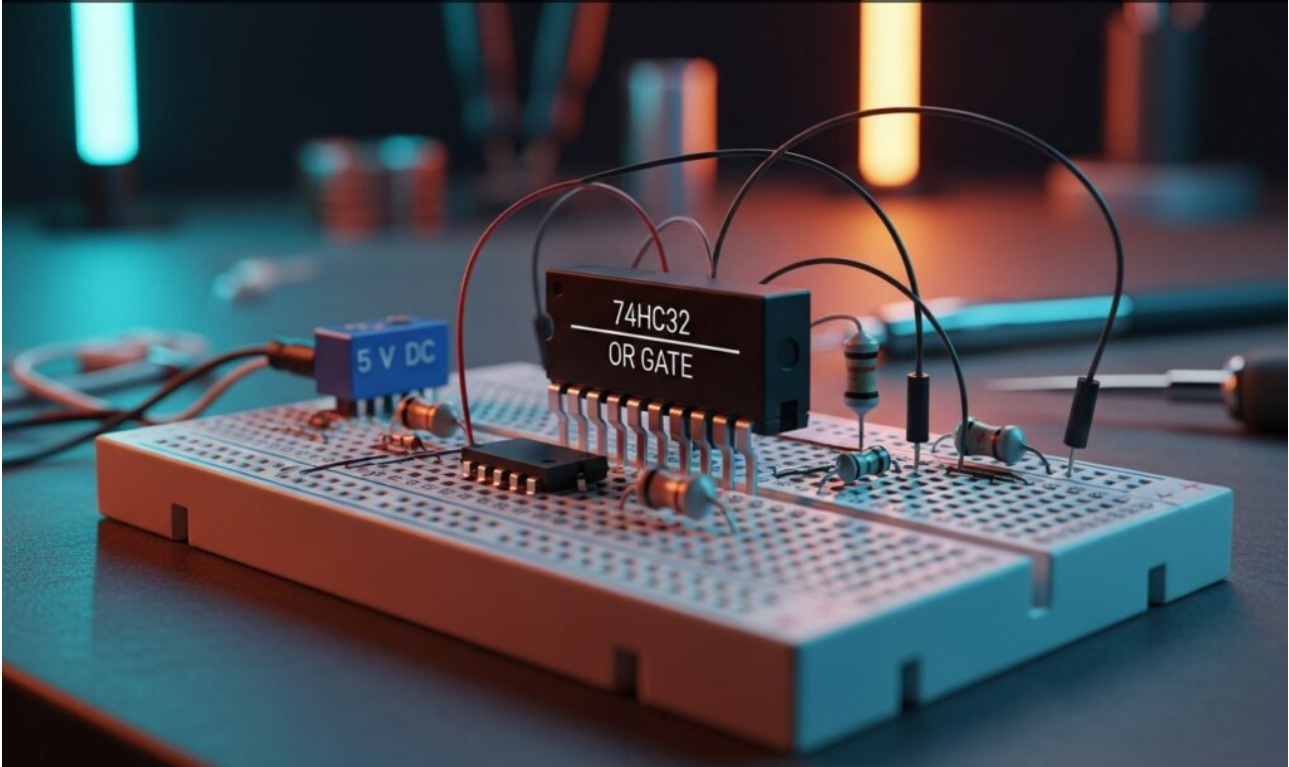
Signal inverter with indicator LED



Master Digital Electronics by building a safety interlock circuit with a NOT gate. Learn to invert logic signals and control LED indicators for real-world...

Practical case: Emergency water pump activation

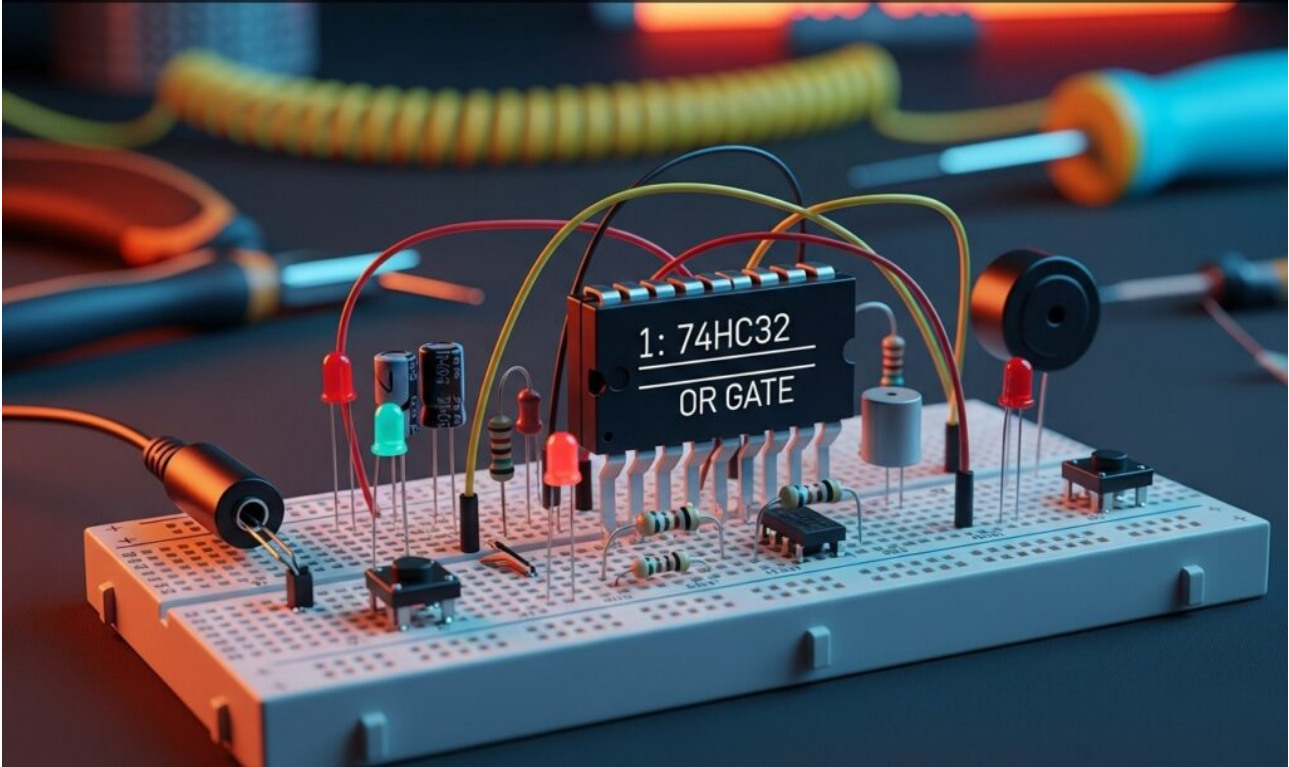
Emergency water pump activation



Master Digital Electronics by building a flood prevention system. Use an OR gate to activate a drainage pump when water sensors trigger a 5V logic signal.

Practical case: Car Door Open Warning System

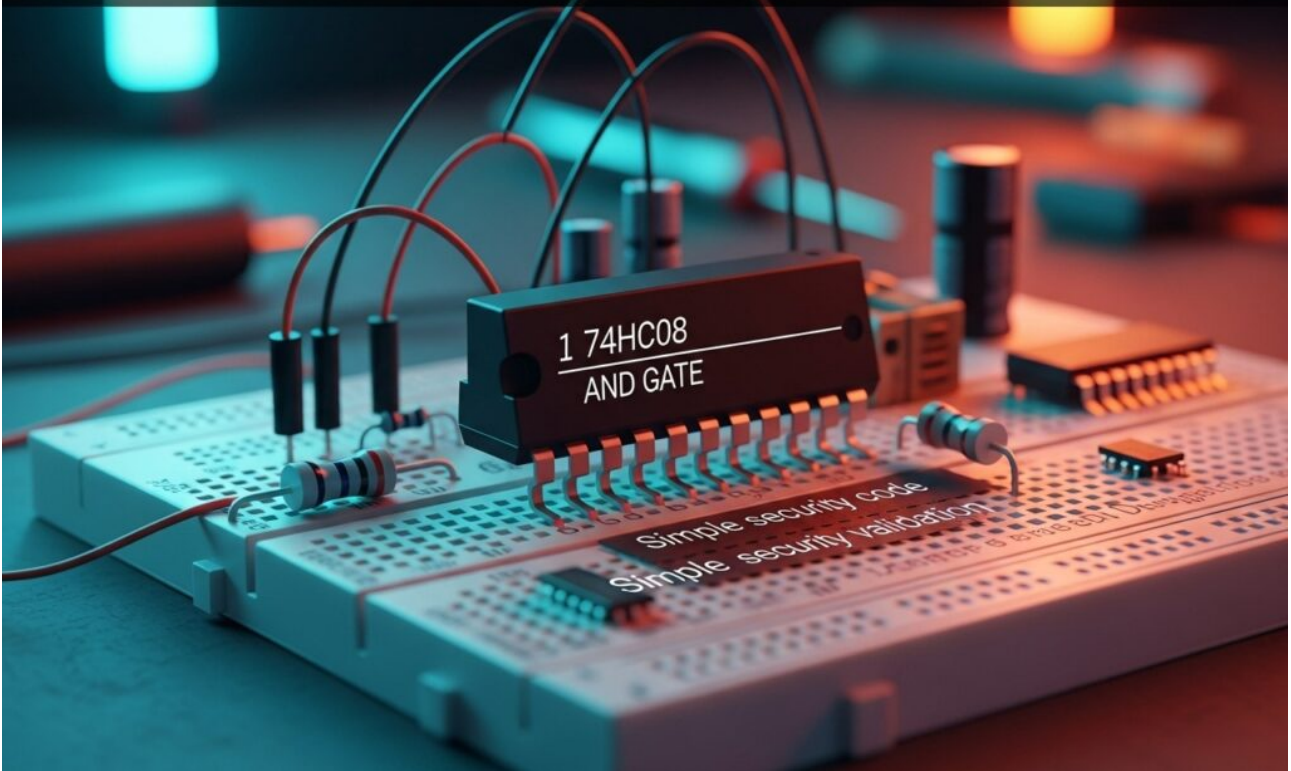
Car Door Open Warning System



Master Digital Electronics by building a car door alarm with a 74HC32 OR gate. Learn to detect open circuits and trigger LED alerts for safer security systems.

Practical case: Simple security code validation

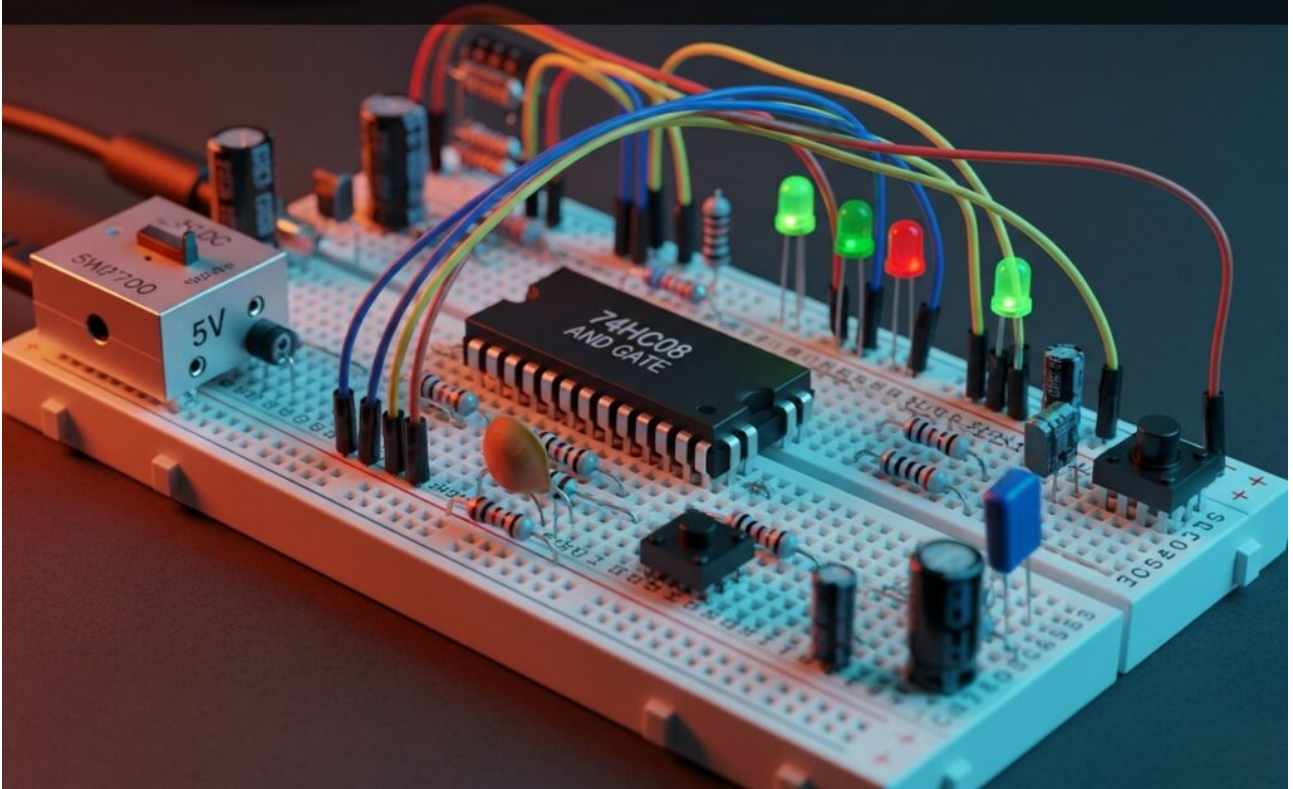
Simple security code validation



Master Digital Electronics by building a dual-switch security lock. Use a 74HC08 AND gate to trigger a solenoid only when two signals activate simultaneously.

Practical case: Conveyor belt start system

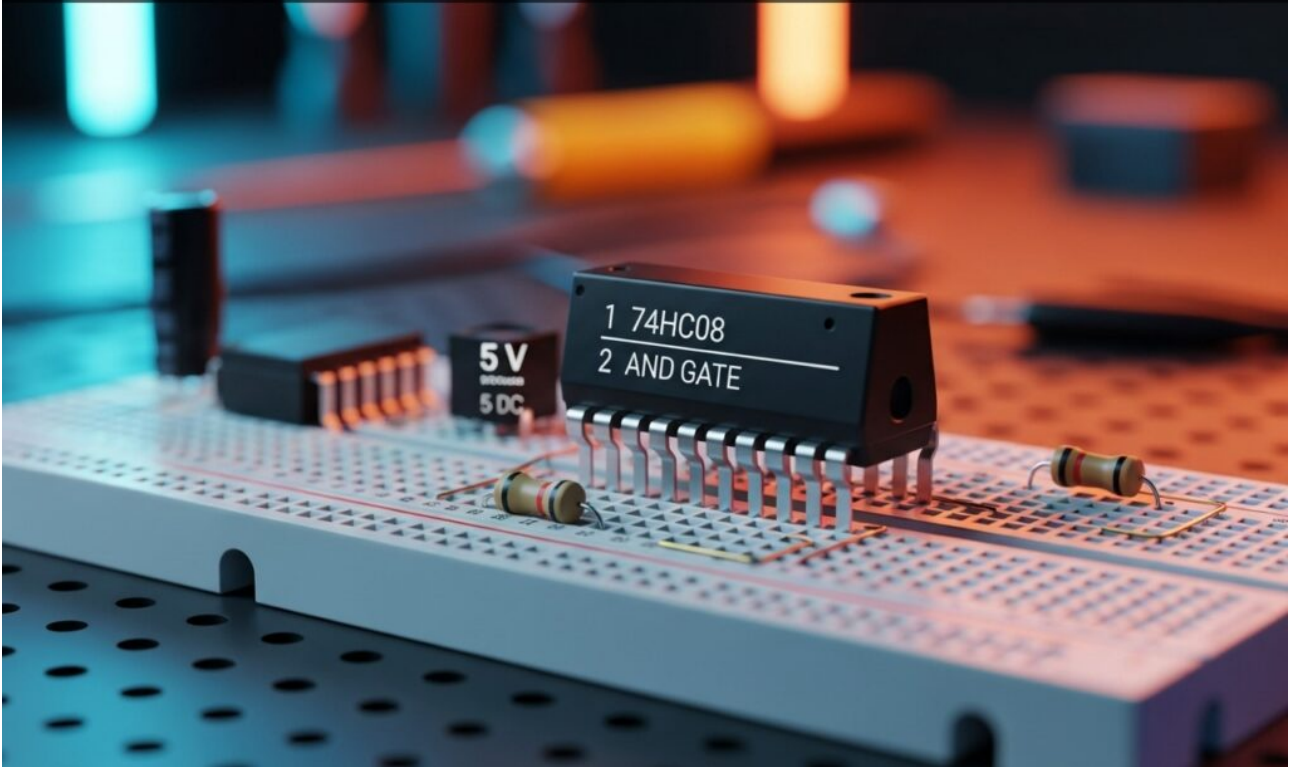
Conveyor belt start system



Master Digital Electronics by building a safety interlock circuit. Use a 74HC08 AND gate to activate a conveyor motor only when specific sensor signals align.

Practical case: Temperature and Pressure Monitoring

Temperature and Pressure Monitoring



Master Digital Electronics by building an industrial safety circuit. Use an AND gate to trigger an alarm only when both temperature and pressure sensors spike.