

Arduino Project Ideas

Math Related

Arduino has a Project Hub, which is an online forum for people to share, remix and 'give props' to ideas and projects that others have uploaded. It can serve as a resource for inspiration, but also to help trouble shoot issues that someone might have. The Project Hub can be found here:

<https://create.arduino.cc/projecthub>

The following are some ideas that other Makers have had, and have uploaded onto the forum.

Life Band Health Assistant for Elderly -

"Old aged peoples , Alzheimer's affected ones, persons with heart problems always need a attention . if they do heavy works , skipping their food ..etc, will affect the health condition of these persons much more.

Consider old age peoples lives in home alone during day times because son/daughter goes to work and grand children's goes to school. during these times no one will be there to take care or them. even if they fall down ,mild stroke occurs, temperature increases the first aid will only get when someone notice it ,it may take long time since no one is there. this may lead to situations that we loose them

To overcome this situation I invented the Health band..it monitor the motions and status of the person ,heart beat rate, temperature, up-to-date. If the there seems A Sudden fall due to heart attacks or loosing balance ,or abnormal fall or rise in heart beat rate it alters the near by ones of the person to get immediate attention ,the Health band also measures the temperature of the person in order to understand the person health condition.

Thus by the smart Heath band we can take care Of our beloved ones from any were In the world."

https://create.arduino.cc/projecthub/user06254/life-band-health-assistant-for-elderly-70e6f6?ref=platform&ref_id=424_trending__&offset=7

Tide gague -

"Getting your boat stuck in the mud in a shallow bay is easy if you do not know how deep the water is. Since accurate tide predictions and real-time water levels are not available for most bays and estuaries, including the one I boat in, I built my own low-cost, real-time tide gauge.

My tide gauge publishes tidal water levels on the Internet, and it sends alerts via a Twitter account using a combination of open source Arduino hardware, the free ThingSpeak service, and MATLAB.

Doing nothing stuck in the mud Just pumping the blood The water level's getting low Something ugly is going to show ...

Peter Gabriel – Flotsam and Jetsam

Peter Gabriel's lyrics in Flotsam and Jetsam aptly describe the hapless boaters stuck in the mud during spring lows on Ockway Bay in Mashpee, Cape Cod. There is a good chance of something ugly happening as a boat motor churns up a rooster tail of black mud while making absolutely no headway."

https://create.arduino.cc/projecthub/matlab-iot/measure-and-analyze-tide-levels-with-thingspeak-and-matlab-efa405?ref=platform&ref_id=424_trending_part_offset=5

Fidget spinner RPM counter -

https://create.arduino.cc/projecthub/andriy-baranov/fidget-spinner-rpm-counter-253ac0?ref=platform&ref_id=424_trending_part_beginner_offset=6

Graphical Programming Drawing Robot on the Wall -

“Kids in makerspace often like to play with drawing robot, but those drawing robots on the market are either too pricey or hard to program, so there comes to our project, we made this project for beginners who would love to learn coding and give them sufficient exposure to mechanics, hands-on ability. With this drawing robot, you can learn trigonometry or even drawing skills (kidding!). Anyway, we would like to inspire next generation of maker.

We used a Scratch 3.0 based off-line version software for the ease of programming. The software is called KittenBlock, it uses blocks for programming and is very easy to get started with. Graphical blocks can help beginner to avoid loads of typing and syntax, creating a bridge to learning a powerful and commonly used programming language such as C++.”

https://create.arduino.cc/projecthub/kittenbot/graphical-programming-drawing-robot-on-the-wall-dbc75a?ref=platform&ref_id=424_trending_part_beginner_offset=3

Padlet:

<https://padlet.com/uoitsteam3d/6mz5wx4fz5v0>