



SOLHUT
BUSINESS SOLUTION PROVIDER

**Home & Industrial IoT
Solutions and Services**

The **INTERNET** of **THINGS**



A Smart, Secure and Connected World!

Solution Hut believes that the Home & Industrial Internet of things can be defined as "Connecting intelligent physical entities such as sensors, devices, machines and products to each other, to the Internet services and to applications. The Home & Industrial IoT architecture builds on current and emerging technologies such as mobile, wired and wireless networks, the cloud, Big Data, Analytics and visualization tools. The industrial IoT emphasizes remote access to connected devices and machines to enable transformative business improvements and efficiency. Intelligent connected products, in turn help improve performance and reduce downtime through remote diagnostics, trouble shooting and condition monitoring capabilities.

All these approaches are aimed at improving reduce electrical consumption, remote access, unplanned downtimes, improve productivity and enable all connected assets to function in a more

effective manner. For today's high performing manufacturing firms, the ability to leverage this technology to improve profitability and revenue represents a challenge. Solution Hut is here to help!

Solution Hut works with all leading industry sectors such as Home Automation, Manufacturing, Automotive, Logistics and Transport, Consumer Goods and Energy & Utilities to help enhance their products and offerings alignment with the Internet of Things. We take pride in introducing the IoT ecosystem to a lot of consumers /companies and also have the capability to consult to help create the right solution to bring the benefits of IoT. Our Services range from Designing Hardware devices, cloud enablement, mobility enablement, Engineering and Real Time Analytics and consulting to create end-to-end solutions. Our services also include managed Services via our SOC/NOC to ensure that the IoT infrastructure is up and running for the business.

What We Offer?

Solution Hut brings the ideal blend of technology expertise (to develop/enhance products in IoT chain), domain expertise (for vertical solutions) and consulting expertise (for creating the right solutions with the right partner ecosystem). Our ability to integrate these solutions with consumer automaiton and business processes makes us the idea partner for creating end to end solutions. Our expertise can be broadly classified into 7 areas:



**Connected
Devices**



Integration



**Intelligent
Platforms**



**Vertical
Applications**



Consulting



Testing



**Managed
Services**

Our IoT Solutions Enable You To Securely Connect Smart Things, Manage and Analyze Data, Create Applications, and Ultimately Transform Your Business

Consulting & Solution Development

- Business Solution with the right device and platforms to build a solution
- Solution development enabling right analytics, mobile access, security, deployment
- Integration of solution with business applications like SAP, SFDC etc.
- UX services based on the end user analysis

ISV / Platform

- Data Connectors to various mediums of communication
- Development and verification of scalability, reliability and performance of the platform
- Development of device deployment and management modules
- Enhancement of the platform to vertically focused markets
- Device monitoring and management

CSV / MNO / MVNO

- Build and maintain the IoT service enablement platform
- Build domain specific solutions (SaaS)
- Develop analytics on the usage patterns to come up with better IoT connectivity plans.
- Build and integrate platform components

OEMs / Device

- Device / Gateway hardware development / Re-engineering for low cost and low power consumption
- Device firmware development for local processing and analytics
- Server side / cloud platform development / integration via custom development or platform partnerships

Home Automation IOT

Smart boards for home automation which can drive typical loads in a residential setting. Boards connects with the internet via available hotspot to push data on cloud-based IOT server. Users are given web, iOS and Android App options to configure, track and control their smart boards from anywhere in the world with internet connectivity. Boards include current sensing, On-Off and fine control of loads such as dimmable lights and fans, and monthly bill estimation facilities.

Automatic Water Treatment Plants with IOT Cloud and Android App

Complete automation for a growing network of 200+ water treatment plants such as Reverse Osmosis and Ultra-Filtration plants. Automation include touch-based, Android App as well as web-based sensing, reporting and triggering of around 18 processes of maintenance and filtration of water plants. A cloud based stretchable architecture employed at the server side to cater for the growing need of the system. Plant is capable of sensing water flows, pressures, tank levels, and voltage and current of three sources i.e. grid, gasoline generators, and solar panels.

Automatic License Plate Recognition system

Intelligent OCR for standard and non-standard license plates passing through high-way toll plazas and city entry points in the country. State of the art machine learning algorithms are used to recognize difficult license plates and thus product is estimated to supersede, in capabilities, any competitive software in the market.

Experience

Android and iOS emergency gear

Programming and hardware troubleshooting of a keychain sized gadget to connect with iOS and Android phones via Bluetooth low-energy (BLE) as phone accessory. Pressing buttons in a specific manner generates emergency call to saved number. The user is able to talk through the gadget directly. Three TI ICs including MSP430 used to implement this system.

Bluetooth Pagers for Young Scouts

Bluetooth pager is a complete Bluetooth wireless communication embedded device for vicinity based preference matching and gaming. Includes complete hardware and software design and full featured prototype development. These pagers work within the Bluetooth standard range e.g. 10 meters for class C Bluetooth model.

Face Recognition Device (Under Development)

Intelligent camera devices with complete facial recognition capability built-in to recognize pass-through individuals. Device offers simple wired as well as Wifi connectivity option for ready integration with existing systems.

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