

تاریخ:

شماره:

پیوست:



بهین همراه آینده روشن



Behin Start

BMS PROPOSAL

Proposal of Behin Hamrah Ayandeh Roshan Company

Introduction and Overview of Behin Hamrah Ayandeh Roshan Company

Behin Start, operating under the name Behin Hamrah Ayandeh Roshan, is a dynamic technology company with a skilled team of more than 40 software experts and 20 hardware specialists. The company delivers and implements innovative and professional projects focused on the design and development of functional software applications, as well as the advancement of monitoring and control systems across industrial, administrative, and commercial sectors.

The departments of this company include:

- BMS (Building Management System) software development
- Manufacturing of control boards and HVAC systems, along with execution of industrial control and monitoring projects
- Development of software solutions for web platforms, Windows applications, and mobile devices
- Artificial intelligence software development
- Design and creation of virtual reality (VR) games
- Production of products related to augmented reality (AR), virtual reality (VR), and simulation technologies
- Specialized department for the design and development of VR-based gaming experiences
- Software maintenance and support services
- Sales and customer engagement division
- Administrative division, including human resources and corporate management

Core Activities of Behin Hamrah Ayandeh Roshan Company:*Behin Hamrah*

Ayandeh Roshan is engaged in a wide range of technological services and product development, including:

- AR and VR, including VR modeling, VR software, AR modeling, and AR software
- Development and deployment of smart control systems and Building Management Systems (BMS), including dedicated BMS software
- Game development projects, such as *One Line Filler Puzzle*, *Rushing Balls*, and various multiplayer games
- Comprehensive website design services, including corporate, e-commerce, educational, and personal websites
- Search Engine Optimization (SEO) services
- Mobile application design and development
- Web and Windows-based software programming

Overview of the BMS Project and Its Necessity in Modern Buildings

The Building Management System (BMS) has become an essential solution for businesses aiming to enhance operational efficiency and optimize energy performance. Through intelligent monitoring and control of systems such as heating, ventilation, and lighting, BMS enables precise data analysis on energy consumption. This empowers building managers to reduce energy usage and significantly cut operational costs, making it a key contributor to resource efficiency.

Beyond its economic benefits, BMS plays a vital role in improving indoor environmental quality. By maintaining optimal levels of temperature, humidity, and air quality, the system enhances occupant comfort and well-being. These improvements not only support healthier living and working conditions but also positively influence staff productivity and client satisfaction.

Ultimately, the implementation of a BMS can support businesses in achieving sustainability goals and reducing their environmental footprint. By optimizing energy usage and minimizing waste, businesses can lower their carbon emissions and comply with environmental standards. This not only boosts a company's reputation and social responsibility but can also offer a competitive advantage and ensure compliance with environmental regulations.

Behin Start, with its experience and expertise, is ready to collaborate closely with you.

Objectives of the BMS Implementation Project

The Building Management System (BMS) project is designed with the goal of optimizing the management and control of various building systems, including HVAC, lighting, and security. One of the main objectives of this project is to enhance energy efficiency and reduce the building's operational costs. Through BMS, building managers can automatically and intelligently control and optimize system performance, which in turn leads to lower energy consumption and related expenses.

Another key goal of the BMS project is to improve the comfort and safety of building occupants and users. By utilizing advanced sensors and control systems, BMS enables precise monitoring and management of the environmental conditions, contributing to a better quality of life and a safer environment. Additionally, these systems can detect and respond to issues in real time, which helps reduce risks and increase user satisfaction.

Technical Requirements and Infrastructure for Implementation

The Building Management System (BMS) functions as a vital tool for optimizing the performance and management of a building's infrastructure. From a technical standpoint, a typical BMS includes various sensors, actuators, and controllers that continuously measure

and regulate environmental parameters such as temperature, humidity, and air quality. The system connects to other building systems—such as lighting, heating, ventilation, air conditioning (HVAC), and security—using standard communication protocols like BACnet, KNX, and Modbus, enabling centralized monitoring and control.

On the infrastructure side, a successful BMS installation demands meticulous planning and coordination with all related building systems. This includes the proper installation of communication cables, networking hardware, and control panels, all carried out with high precision and efficiency. In addition, the BMS software must undergo regular updates and be fortified with cybersecurity measures to guard against potential threats and ensure stable system performance. The system architecture should also support scalability and future upgrades to accommodate changing requirements and technological progress within the building.

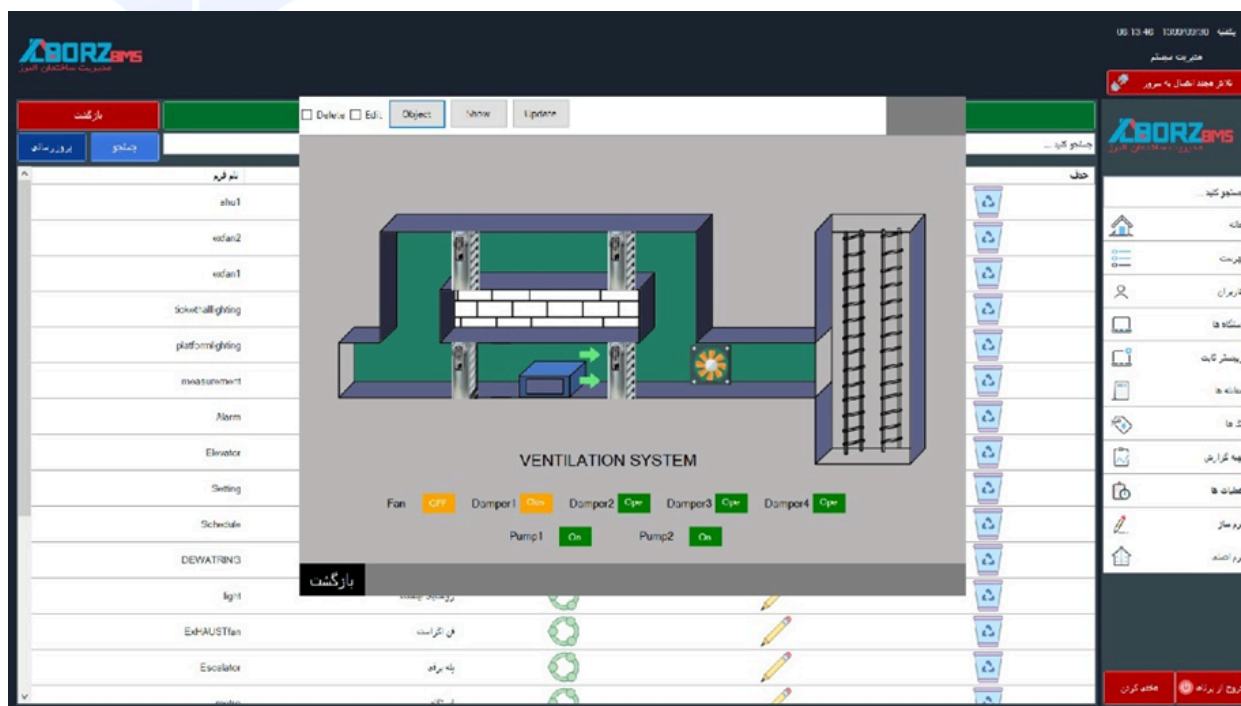
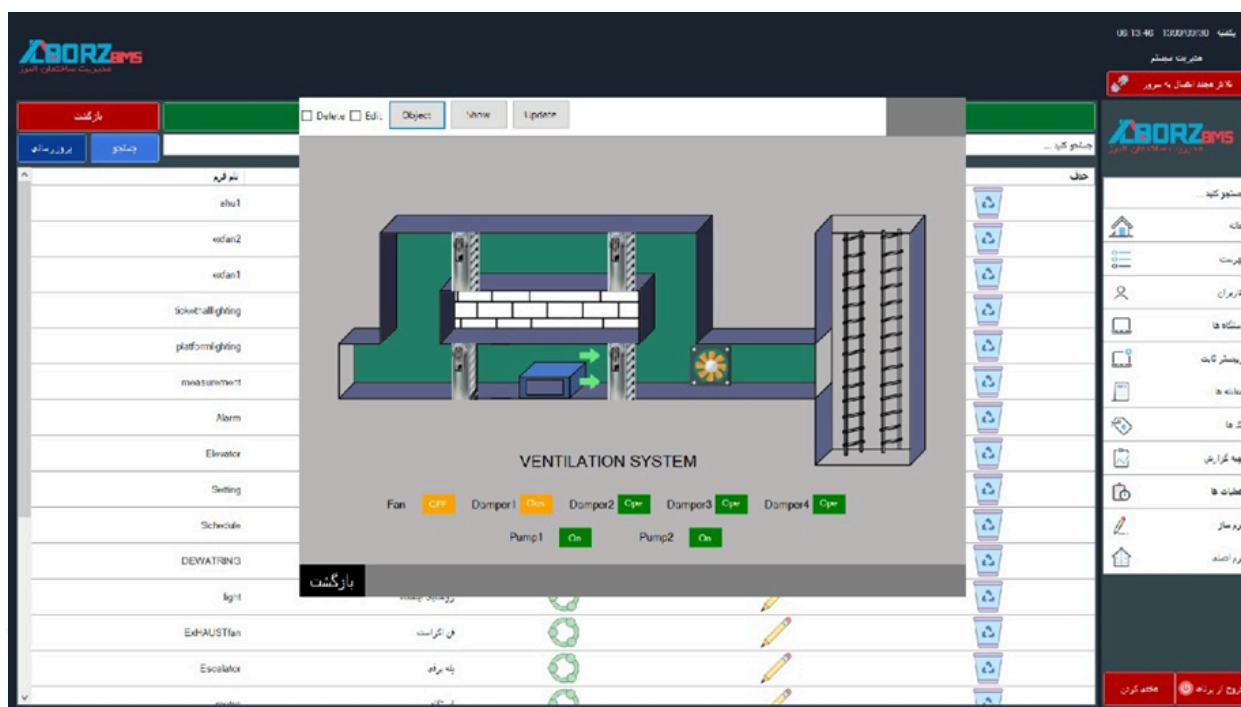
Proposal Submission Method

With a proven background in BMS solutions, our company is fully prepared to offer specialized consultation and establish a collaborative partnership with you. The structure and content of the proposal will be tailored based on your specific requirements and preferences, which will be finalized after a scheduled meeting—either in person or online.

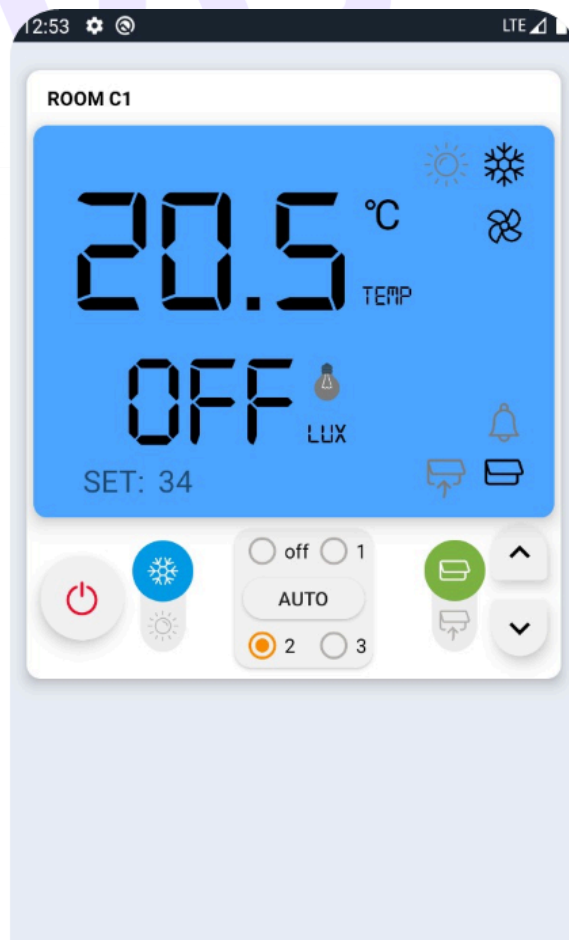
Time and Cost Estimation for the Client

This aspect also varies depending on the needs, requests, and specific project of the valued client.

Sample Web-Based BMS Software:

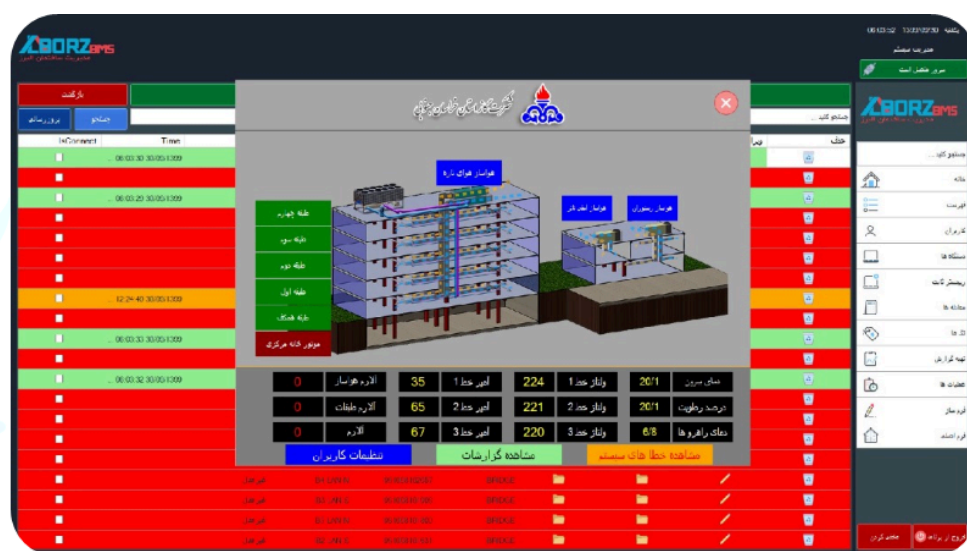


Example of a BMS Application for Android Devices:

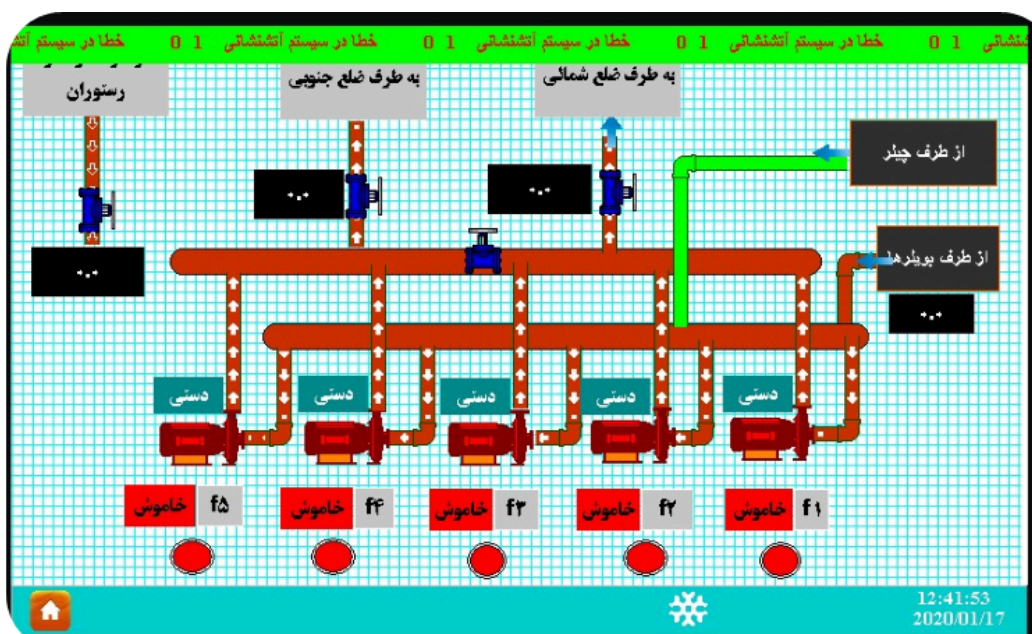




Sample of Completed Projects:



Birjand Area Gas Company (or Birjand Regional Gas Authority)



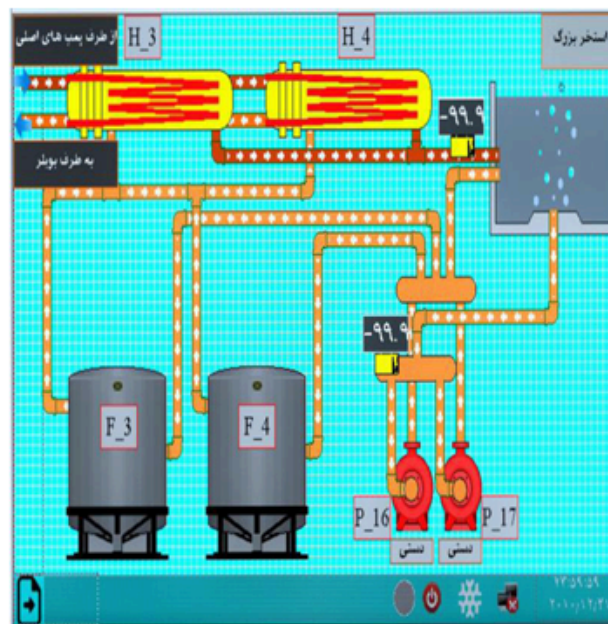
تاریخ:

شماره:

پیوست:



Atlantis Recreational Complex, Pardis Town



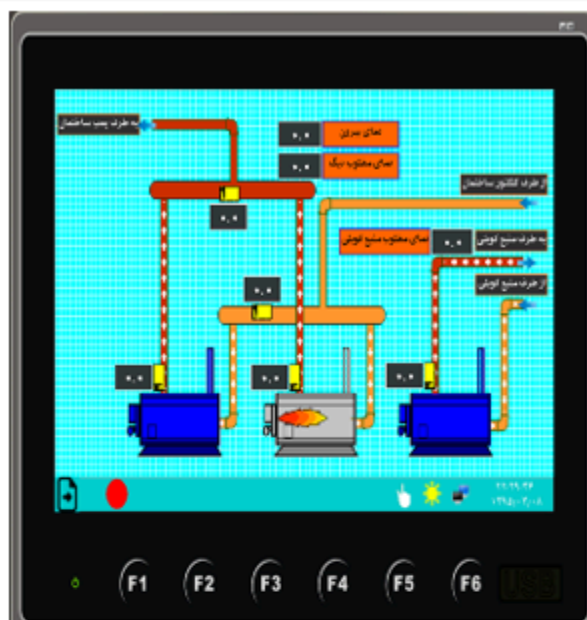
East Tower Building



تاریخچه آلارمها		تغییرات کاربر
تاریخ	نوع تغییر	ملاحظات
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_Main (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_Powerhouse (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_۱DO (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_۱DI (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_TMPA_Termo (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_Boiler (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_Boiler (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_Chiller_CT (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_AHU_۱ (OK)	
۱۳۹۳/۰۲/۲۶	modbus_۱۲۰_Delta_Drive_۱ (OK)	

Hashemi Nejad Martyr Gas Refinery





Hardware and software design
for the swimming pool control
system at Parvadeh Tabas Coal
Company in the year 2017



Design and implementation
of the control and
monitoring system for the
chillers at Gol Gohar Iron
Ore Mine, Sirjan, Kerman, in
2018

Sample of Work Completion Certification and Energy Consumption Reduction Certificate:

**شرکت مهندسی سیستم مدیریت ساختمان البرز**
طراح و مجری سیستم کنترل و مانیتورینگ

تاریخ: 1400/02/22
شماره: 400/15/گ
پیوست: ندارد

بسمه تعالی
گواهی حسن انجام کار

بدین وسیله گواهی می گردد آقای جواد اسفندی گلباغی فرزند علی به شماره ملی 2709424908 در انجام قراردادها و پروژه هایی که به شرح ذیل می باشد:

- 1- پروژه ولی عصر واقع در تهران خیابان مژده که شامل انجام برنامه نویسی سیستم کنترل و مانیتورینگ پنج دستگاه هوا ساز می باشد
- 2- مدیریت کلیه امور طراحی و ساخت و مونتاژ برد های فن کویل برای شرکت تهویه (شامل بردهای فن کویل کشتی، برد داکت اسپلت، بردهای کنترل مانیتورینگ از راه دور)
- 3- مانیتورینگ چهار دستگاه چیلر تراکمی کمپرسور اسکرو بیمارستان خلیج فارس بندرعباس توسط PLC های زیمنس
- 4- برنامه نویسی و نصب و کنترل موتورخانه سرمایشی دو چیلر تراکمی معدن سنگ آهن گل گهر سیرجان
- 5- پروژه مانیتورینگ و BMS مجتمع تجاری تفریحی آتلانتیس شهر پردیس

امور مربوط به برنامه نویسی، ساخت و اجرا را برای شرکت مدیریت ساختمان البرز به عهده داشته و این شرکت رضایت کامل خود را از انجام کار های مربوطه اعلام می دارد.

آرزوی موفقیت روز افزون برای ایشان داریم.

مدیر عامل
محمد ابازی

سیستم مدیریت ساختمان البرز
۴۲۳۴۸۰

آدرس: استان تهران، بلوار فردوس غربی، سازمان برنامه جنوبی، کوچه بیستم مرکزی، پلاک 17
وبسایت: www.alborzbms.ir ایمیل: info@alborzbms.ir - alborzbms.co@gmail.com تلفن: 09123365166 - 02188223276

Scanned with CamScanner

استانداردی قزوین
شهرداری محمديه

سازمان حمل و نقل مکانیک و برق

تاریخ: ۱۳۹۳/۰۵/۰۱
شماره: ۹۳/۹۵۶
پیوست: ۱

جناب آقای جواد اصغری گلباغی

با سلام؛

پیرو قرارداد شماره ۹۳/۹۵۶ مورخ ۹۳/۰۵/۰۱ این سازمان رضایت کامل از آقای جواد اصغری گلباغی و عوامل تحت نظر ایشان در زمینه تعمیر و نگهداری تاسیسات برقی و مکانیکی و شبکه سازمان دارد.

حشمت الله ترابی
مدیر عامل سازمان

محمديه - منطقه ۴ - کمربندی شهید بابایی - جنب رستوران سبز
تلفن: ۰۲۸-۳۲۵۷۷۳۳۳، ۰۲۸-۳۲۵۷۲۵۵۱ و ۰۲۸-۳۲۵۷۷۳۳۴ - فکس: ۰۲۸-۳۲۵۷۲۵۵۲ - پست: ۰۲۸-۳۲۵۷۷۳۳۳

Certificate of Energy Savings for South Khorasan Gas Company

شماره: ۱۲۹۰۱
تاریخ: ۱۳۹۲/۱۱/۱۷
پست:

ریاست جمهوری
سازمان ملی استاندارد ایران
اداره کل استاندارد استان خراسان جنوبی



به : مدیرعامل مکتوم شرکت مهندسی سیستم مدیریت ساختمان البرز
موضوع : پاسخ

باسلام

احتراما عطف به نامه شماره الف ۹۲/۲۶۹ مورخ ۹۲/۱۱/۱ با توجه به نصب دستگاه سیستم کنترل هوشمند موتورخانه توسط آن شرکت، ضمن تقدیر، کاهش ۵۵ درصدی مصرف گاز اشتراک شماره ۰۳۸۰۰۹۱۰۶۲۴۴ مربوط به این اداره کل تایید می گردد.

محمدرضا اکبری
معاون منابع انسانی
و امور پشتیبانی

Key Scientific and Practical Accomplishments

We have established a production line dedicated to designing and manufacturing electronic control boards, having produced over 10,000 units along with more than 20 distinct control products for HVAC system manufacturers. Alongside this, a specialized software team was created to develop applications for Windows, Android, and cloud platforms focused on HVAC equipment monitoring and control, as well as Building Management Systems (BMS).

Achievements:

- Updating the monitoring systems for the Birjand Regional Gas Company along with 4 solar power plants related to the headquarters building, sports complex, warehouse complex, and Birjand Gas Department, as well as the centralized Dasht-e-Bajad power plant in 2025, Contract No. 380880
- Winning the top invention award in Iran in 2010
- Receiving gold and bronze medals at the Dubai Invention Festival 2024 for monitoring and control systems using artificial neural networks and AR/VR technology
- Receiving a bronze medal at the Adana Invention Festival Summer 2024 in the field of intelligent systems and monitoring using artificial neural networks
- Winning the AEI gold medal for monitoring and control systems utilizing artificial intelligence
- Design and manufacture of fan coil cassette control boards
- Design and manufacture of split air conditioner control boards
- Design and manufacture of GPRS monitoring boards
- Design and manufacture of dual-circuit chiller control boards
- Design and manufacture of multi-zone air conditioner control boards
- Design and manufacture of network-to-Modbus converters
- Design and manufacture of Wi-Fi to Modbus converters
- Design and manufacture of cassette split air conditioner control boards
- Design and manufacture of ducted split air conditioner control boards
- Design and manufacture of wall thermostats
- Design and manufacture of lighting and room ventilation control panels

- Design and development of comprehensive control and monitoring software for Windows and Android
- Equipping all products with monitoring capabilities and integration with Building Management Systems (BMS)
- Designing integrated control systems for all energy producers and distributors in buildings
- Increasing the number of monitoring devices on Modbus
- Implementation of a Building Management System (BMS) using Siemens and Delta multifunction PLCs
- Implementation of a Building Management System (BMS) using custom-designed control panels
- Modeling projects for offices, commercial spaces, and industrial environments with smart management capabilities

Projects:

- Partnership with DOF ROBOTIK for the Metarium Show
- Collaboration with Malaf Company, Istanbul
- Collaboration with Simoto (Control Gostar Kahrobar)
- Manufacturing over 11,000 BMS-capable electronic control boards for an HVAC company from 2017 through 2021
- Design and implementation of the BMS project for Atlantis Commercial Complex in Pardis City, Tehran, including pool monitoring systems, HVAC systems, and heating and cooling facility rooms. (New Pardis City, Tehran, 2020-2021)
- Production of 200 GPRS control units and remote control and monitoring software for HVAC equipment for an HVAC company in 2020-2021
- Design and manufacture of 500 electronic control boards for ducted split systems with BMS capability for an HVAC company in 2019
- Design and implementation of control and monitoring system for chillers at Gol Gohar Iron Ore Mine, Sirjan, Kerman in 2018

- Design and manufacture of hardware and software for control and monitoring of HVAC and lighting equipment in Tehran Metro, 2019-2020
- Design, construction, and implementation of a Building Management System (BMS) including central unit, HVAC, lighting, and fan coil units for the South Khorasan Regional Gas Building (selected as a green building due to over 25% energy consumption reduction), Iran, 2018
- Design and operation of a BMS for Kerman Oil Refining and Distribution Company, Iran, 2018
- Design of hardware and software for swimming pool control at Parvadeh Tabas Coal Company in 2017
- Design, manufacture, and installation of HVAC control system for the central building of the Industry and Mine Bank, Tehran, 2017
- Design and manufacture of HVAC control and monitoring system for Lavasani Hospital, Tehran, 2017
- Monitoring of 8 chillers with 16 screw compressors at Persian Gulf Hospital, Bandar Abbas, Iran, since 2016
- Design, manufacture, and implementation of HVAC control systems for operating rooms and hospital departments at Amir al-Momenin Hospital, Khoy, since 2016
- Design and implementation of BMS at Bank Saderat Birjand, South Khorasan Province, Iran, since 2014
- Design and implementation of BMS at the Judiciary of South Khorasan Province since 2014
- Design and implementation of BMS at Bojnord Petrochemical Company, North Khorasan Province, Iran, since 2013
- Design and implementation of BMS at Alborz Insurance Branch, Tehran Province, Iran, since 2012
- Design and implementation of BMS in the administrative building of Water and Wastewater Company Region One, Tehran Province, Iran, since 2011
- Design, manufacture, and implementation of monitoring system for Moin Pouyandegan Sand and Gravel Factory, Shahriar, Tehran Province, 2009-2010
- Construction and installation of heating and cooling control equipment for schools and government offices in Iran, 2008
- Production and installation of temperature monitoring and maintenance equipment for veterinary cold storages in Iran, 2008

- Production and installation of heating and cooling control equipment in schools and government offices in Iran, 2008
- Production and installation of monitoring and control systems for heating systems in universities and telecommunications centers in various cities in Iran, 2007
- Simulation and calculation project of solar systems on Android, iOS, and Windows platforms

Awards and Patents

- Earned gold and bronze medals at the 2024 Dubai Invention Festival for a monitoring and control system employing artificial neural networks alongside AR and VR technologies
- Secured a bronze medal at the 2024 Adana Invention Festival for an intelligent monitoring and automation system based on artificial neural networks
- Awarded the AEI gold medal for AI-driven monitoring and control solutions
- Developed an intelligent safety enhancement system for press machines that operates without PLCs (2008)
- Created a temperature and pressure recording system for movable structures with data retention exceeding 80 years, including date, time, and error type logging (2007)
- Designed an intelligent stepwise heating and cooling control system for boiler rooms utilizing artificial neural networks (2007)
- Developed a smart system using separate humidity, temperature, pressure, and lighting sensors, capable of long-term error logging for fog and dust detection including timestamps (2007)
- Supported by Iran's National Elite Foundation since 2009
- Recognized as the top inventor at the 2009 invention exhibition in Qazvin Province, Iran
- Invited to participate in invention exhibitions during 2009, 2009, and 2012
- Successfully commercialized and produced three inventions from 2009 onward

تاریخ:

شماره:

پیوست:

Gold Medal
from
Turkey



Gold and bronze medals awarded in
Turkey for achievements in artificial
neural networks and virtual reality
technology

Received the
Gold Medal
at the Dubai
Exhibition
held on
December
12-13, 2024



تاریخ:

شماره:

پیوست:

Certificate
of Patent
Registration
for the
Smart Boiler
Room
System

شماره ثبت اختراع: ۳۸۶۱۲۵۱۱
تاریخ ثبت اختراع: ۱۳۸۶/۱۲/۱۴

شماره ثبت اختراع: ۴۷۴۴۷
تاریخ ثبت اختراع: ۱۳۸۷/۲/۴

قوه قضائیه
سازمان ثبت اسناد و املاک کشور

اداره کل ثبت شرکتها و مالکیت صنعتی

کد: (۳۰) الف (۱-۸۵) ت

کوهایی نامه ثبت اختراع

طبق قانون ثبت اختراعات کوهایی می شود اختراع راجع به

سیستم هوشمند اهراتوری موتورخانه های گرمایشی و سرمایشی بصورت

پله ای

که در تاریخ در کشور شماره ثبت شده است

نام جواد اصغری گلپایگانی سعید ایازی سامان صالحی

تابعیت: جمهوری اسلامی ایران

مقیم قزوین محمدیه (زیباشهر) منطقه ۵ ک ۳ پ ۳۷

که نشانی خود را در ایران به شرح فوق تعیین نموده است

برای مدت بیست سال ماه روز

ثبت رسیده است این درود که یک نوزاد توصیف و ثبت اختراع را به پیرت دارد باک

نشی اداره مالکیت صنعتی

اداره کل مالکیت صنعتی

تاریخ:

شماره:

پیوست:

Certificate of
Registration
for a Data
Recording
and Storage
System that
Logs Date
and Time

قوة قضائية

شماره ثبت اختراع: ۴۷۴۵۵
شماره ثبت اختراع: ۱۳۸۷/۱۲/۱۴
شماره ثبت اختراع: ۳۸۶۱۲۴۹۷
تاریخ ثبت اختراع: ۱۳۸۶/۱۲/۱۳

اداره کل ثبت شرکتها و مالکیت صنعتی

کد (۳۰) الف (۸۵-۱) ت

کواهی نامه ثبت اختراع

طبق قانون ثبت اختراعات کواهی می شود اختراع راجع به:

سیستم ثبت و ذخیره کننده داده ها و فشار و رطوبت برای مدت بیش از ۸۰ سال
برای سازه های متحرک - همراه با ذخیره تاریخ (روز - ماه - سال) ساعت
و نوع خطا.

که در تاریخ: در کشور: به شماره: تقاضای ثبت شده است

نام: جواد اصغری گلپایگانی - سعید ایازی - سامان صالحی

تابعیت: جمهوری اسلامی ایران

مقیم: قزوین محمدیه (زیباشهر) منطقه ۵ ک ۳ پ ۳۷

که نشانی خود را در ایران: به شرح فوق تعیین نموده

برای مدت: بهیست سال: ماه: روز:

به ثبت رسیده است این و رد که یک نفر از تو صیت و نشر اختراع را به پیوست دارد با کلا

رئیس اداره مالکیت صنعتی

اداره کل مالکیت صنعتی
دفتر اختراعات
رونوشت برآورد با اصل است

تاریخ:

شماره:

پوست:



بهین
Behin Research Agency Platform

پلتفرم تحقیقاتی بهین

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