ASSIMILATE SYSTEMS

AUTOMATION AND CONTROL, NETWORKING AND CYBER SECURITY, IIOT AND FACTORY 4.0 SPECIALIST

CAD: 2D SCHEMATICS AND 3D SYSTEM DESIGN WITH SOLIDWORKS 3D AND ELECTRICAL

PERSONAL DETAILS

NAME: Guy Willetts

DOB: 09.06.1985

CONTACT: Email Guy@assimilate.systems; Tel 07748706348

BASED: North-Norfolk, UK

REACH: Available UK and Europe

DEGREE: First Class Batchelor of Engineering - Industrial Measurement and Control

CHARTERSHIP: Chartered Engineer – IET (Under application)

AVAILABILITY: On request

BACKGROUND

Oil and gas systems specialist; highways control systems design; manufacturing systems control and sensing; process control system design; agricultural precision agriculture and advanced agri-systems design and research; energy supply and smart energy management systems.

PREVIOUS CLIENTS

Conoco Phillips, Invista Textiles, National Grid, Simulation Systems, Agricultural and Horticultural Development Board, Shell, Dartford Tunnel, Honeywell, Proeon, S&H Systems.

SCOPE

Offering adhoc consulting, R&D and design engineering support to systems integrators and engineering departments for the development of a wide range of electro-mechanical systems with industrial automation, control and local area network edge to cloud computing requirements.

CONSULTANCY

Project / research and development;
Report writing (Basis of design documentation, functional design specifications, sales brief);
System architecture and design;

Cyber security for IACS equipment;
Industrial Internet of Things (IIoT) and Factory 4.0;
Cloud integration and edge computing;
Artificial Intelligence and Machine Learning.

ENGINEERING

Systems configuration and programming (SCADA, PLC/DCS, Network, IIoT, sensors and actuators etc.);
Cloud and Local Area Networks server set-up and configuration (application servers, data servers, historians etc.);
Computer Aided Design (CAD): Solidworks 3D CAD, Solidworks Electrical and Solidworks PCB design & documentation, Process and Instrument Diagrams (P&ID, PFD), Electrical and electronic schematics (network design, control system design, panel design, PCB design), mechanical and hardware systems design.
Computer Aided Manufacturing (CAM): Solidworks CAM, CNC machining.

Example solution:
Client brief: Facility operators wish to improve system and operational efficiency, operator situational awareness and develop process optimisation techniques. Management want a real-time overview of process performance across assets and have the ability to provide feedback to increase product output.

Solution: Implement systems review and report findings. Design network architecture and 2/3D CAD, panel drawings etc. Create manufacturing, testing, installation and commissioning plan. Integrate additional wired and wireless sensor networks with existing systems.

Provide secure edge data visualisation dashboard for operations and local staff with built in real-time condition monitoring, machine learning and AI, from the existing and new sensors and systems.

Push data to the cloud to provide wider business dashboard overview and KPI across assets. Cloud based advanced machine learning and AI across assets for business optimisation and decision making.

EMAIL ME