Mechatronic engineer in SFI Food Sdn. Bhd.

Description of the company:

Denis Asia Pacific is a French food company based in South-East Asia. We are the leader in canned seafood in the region with our brand AyamBrand. Our main products are canned sardine and mackerel, as well as vegetables. Our main manufacturing hub is located in Taiping, Malaysia. We employ about 1,000 employees between three main components:

- MAFIPRO SDN. BHD., which produces canned seafood (2 factories) and canned vegetables (1 factory);
- GUINEA FOODS SDN. BHD. which produces canned seafood (1 factory) and sauces/condiments (1 factory);
- SFI FOOD SDN. BHD.: logistic, warehouse and service provider dedicated to our manufacturing site and global markets. The services provided include quality management support to the manufacturing sites.

The company is in the midst of an extensive re-structuration of its canned seafood activities, to consolidate the three main canning components of Mafipro and Guinea foods. It includes a regrouping of buildings, automation of lines, and the continuous improvement of all processes.

Job description:

Based in Taiping, the candidate will be employed under the SFI Food Company. The company is undertaking the centralization and modernization of its fish preparation activities. Until today the industrial process is very traditional and manual. However, the group recently engaged in a large-scale project to modernize our industrial environment, in which we are relying on a lot of internal mechanization and innovation due to the singularity of our positioning on the market (high quality, impossibility of replicating European-type industrial solutions due to the high cost, production in tropical countries). We have already worked in detail over the last two years on self-developed industrial solutions that are promising, and we are now seeking staff skilled in mechatronics and IOT integration to really implement those.

The various missions of the VIE are as follow:

- Integration of our machinery’s control system (reflection on the parameters to be controlled and installation of multiple sensors) and remote response systems (actuators), integration and deployment of mechanical innovations through PLC + HMI and adequate electronic systems (choice of OT & IT convergence technology, programming, integration), and the entanglement of these different systems towards a centralized SCADA type control and management system, development of comprehensive dashboard for HMIs and SCADA.

- Backup solution in case of network failure, error tracking

- Bridge platforms, infrastructure, Application
We are also looking for interactive solutions, with monitoring + feedback possible through smartphone. Because we want an extensive control on our system and with constrained investment, we focus our development on open source solutions whenever possible, and alternative industrial solutions such as industrial controllers programmed in Arduino (Industrial shields, controlino, Ardruino, ESP32,), open communication protocols (Modbus TCP / UDP), solution IoT such as Node-Red and MQTT or Codesys type soft PLC.

The candidate must have previously managed similar projects at the professional or hobbyist level. He must be able to work with a lot of autonomy. The candidate must also be familiar with IT integration, API management, IIoT Data Protocols (MQTT, OPC UA), interaction with Artificial Intelligence solutions.

We aim to move our production system from a descriptive to a predictive model, in a safe and protected environment.

We will also need to precisely model our production line before it is set up in early 2022, and CAD skills are highly welcomed.

The field of application is vast and here are some examples of projects to be undertaken:

- Installation of sensors to monitor various parameters such as temperature, speed, weight, flow rates,...
- Connection and centralization of monitoring and control of dynamic weighers, via Modbus;
- Automation and integration of new technologies, in particular in fish thawing chamber and intelligent cutting machine;
- We are using a very heterogeneous raw material, in which process management is essential to segregate flows in order to achieve production objectives, while respecting specifications and optimizing returns. A task will be to refine of the analysis of our raw material and implement machines parameterized to cut fish according to size, point the finger on the need to use artificial intelligence to optimize our process in the future.
- Network infrastructure, communication, SCADA type supervision through centralized interface and mobile devices.
- Machine synchronization and indexing in production lines.
Profile:

The candidate must be an industrial engineer, specialized in mechatronic, with a strong interest in developing projects with a high level of autonomy. He shall be able to communicate in simple terms with the local team to understand their needs and translate it to the appropriate automation development. He shall have an enthusiasm for open source and alternative industrial solutions, always thinking out of the box to develop economical yet robust solutions.

The candidate must be proficient in English. The candidate must be polyvalent and able to adapt him/herself to a multi-cultural environment.

Job location: Taiping, Perak.

To apply: Please send your CV and application letter to jeanbaptiste@denisgroup.net & vannsony@denisgroup.net.