## **Graduate Engineer**

LZ Lifescience is an independent joint partnership company between Zenith Technologies based in Cork and Lighthouse Systems based in London. Lighthouse systems are the core product owner of one of the first fully cloud based MES systems called ShopfloorOnline (SFOL). The product has actually been on the market for more than 20 years and is used in over 400 facilities but mainly in the discrete manufacturing arena ie. Automotive, oil and gas, Food and Beverage etc. Zenith Technologies which most graduates would probably know operate solely in the Lifescience and Healthcare sector. In 2012 LZ was formed and created ShopFloorOnline Lifescience edition which LZ essentially owns the rights to the implementation of the SFOL solution in the Lifescience sector.

SFOL is one of the first full blown back end and front end fully Cloud based MES solutions ie. You access both via Web Browser. SFOL sits in the ISA S95 level 3 MES layer along with Serialisation products and Data Historians and Warehouses. The recently new version 7 release has moved the product into a full HTML5 interface which supports all the main browsers and is auto adaptable to any device. This now puts the product ahead of all the market leaders in MES world which in the past we were playing catchup. Based on this release and also the minority share purchase of Zenith Technologies by GE Healthcare last year the product has now been officially approved as the MES solution across GE Healthcare facilities. This is a huge development as previous projects we implemented were in smaller companies and contract manufacturers who could not afford the larger market leader products. Since the implementation of the first 2 GE facilities in Logan in Utah and Headquarters in Marlborough we have now started attracting other Tier 1 Biopharma and Pharma companies. The growth we see in the next few years is exponential which is why we need enthusiastic individuals. In a subsequent section I will provide details on the type of individuals we are looking for.

**Job Prospects:** LZ are working on the cutting edge of technology in one of the most lucrative sectors in the world ie. The healthcare sector. Experienced MES engineers demand some of the highest rates and salaries in the sector. As LZ is funded and supported by Zenith Technologies which is almost a 1000 people strong there is always opportunities to swap between both organisations but with the demand LZ is currently experiencing and the pipeline LZ has in the immediate term and in the future there is a long term prospect with LZ.

**Other Benefits:** With the GE acquisition we are now working on interfacing and moving into the "Big Data" space. I am sure this is already a known buzz word or words. But GE are heading the charge with their Predix offering (google search will give some great information). What this means is that we are automatically moving into this space which my predictions is the next 10-15 years of focus within the healthcare sector.

Following on for the GE Healthcare future SFOL is now been implemented on the GE Cell Therapy offering in their initial headquarters in Marlborough in Boston. The Cell Therapy offering is a modular facility which whole production line which processes one individuals blood sample to essentially cure whatever disease they have. We are now truly part of the next generation of medicines which will essentially save and cure people of the worst diseases. General google searches on the net will give huge amount of information about this technology and its potential.

Type of Individuals and experience we are looking for:

 Only minimum requirement – Interest in software and programming. The product uses SQL, C# for interfacing, OPC comms and software configuration. The graphics interface is now HTML5 but Lighthouse support the product with tools to develop the graphics without having to code HTML5 but interest in Web Based programs like XML, HTML always a benefit

- 2. As mentioned SQL and C# are main programming languages used but interest in programming and computers and writing other languages is always a benefit
- 3. As the future is in Data Analytics interest in probability and statistics, data analysis, data mining and warehousing also benefits.

**Locations:** Cork (Zenith office), Head Office (Dublin), UK Office (Warrington), US Office (Philadelphia), Asia (Singapore). Opportunities to both travel or base in one of our office locations.

Link to the website: www.lzlifescience.com