

Job Title: Software development engineer

Reporting to: R&D Manager

Introduction

PSEL is a fast-growing specialist imaging equipment manufacturer based in East Sussex. The company has 22 employees and is part of the Tibidabo Scientific Industries group of companies. The growth of the company has created the need to hire a software development engineer to add to the team.

Background

The company develops and manufactures a wide range of camera products, including a range of x-ray cameras. A software development engineer is required to work in a small team developing software for professional digital cameras and imaging systems for scientific and surveillance markets, based in St Leonards, East Sussex.

Role

The role involves:

- Create, update, and maintain acquisition, control, and post processing DLLs.
- Create, update, and maintain Image Pro drivers for in-house testing and calibration.
- Create, update, and maintain camera control utilities
- Create, update, and maintain PS Viewer end user application
- Assist with code and product testing as needed
- Provide customer support on software issues
- Maintain version control on all software products

Skills required

1. Operational Duties

We are looking for candidates with as many of the following skills as possible:

- C/C++ programming knowledge including OOP, ideally C++17+ with knowledge of MSVC for camera driver (DLLs) development and maintenance.
- Knowledge of Win32 API for Integration of camera drivers in Image Pro for in-house testing and calibration.
- Knowledge of Doxygen and comment style for writing customer facing API documentation.

- Python 3.7+ programming knowledge to work with in-house built PS Viewer application, integration of drivers, debugging, creating releases for testing.
- Team player as well as efficient at working independently, taking initiative to get the job done.
- Proficient both in spoken and written English, with confidence to provide customer support when necessary.
- Knowledge of Bitbucket/Git version control system.
- Knowledge of any data transmitting interfaces, such as: GENICAM, eBUS, TISGRABBER, Camera Link, Server Sockets (raw data), Serial COMs.
- Knowledge of cross platform development tools, such as Boost.
- Knowledge of OpenCV image processing library or equivalent.
- Knowledge of multi-threaded application development.
- Experience writing unit tests.
- Experience working with Jira.

The ideal candidate will ideally have a minimum of 3 years' experience in a related field and will value the autonomy and responsibility of working in a small multidisciplinary team to develop new high value professional products being sold around the world.

2. Human Resource

Leadership

- Promote and uphold company performance standards and ideology (quality, continuous improvement, housekeeping & work ethic).

Staff Training & Development

- Identify, justify and undertake external appropriate training which will be beneficial to PSEL

Performance

Ensure the following operational excellence:

- Right first time
- High productivity
- High efficiency
- High effectiveness

3. Health & Safety

- Promote & maintain awareness and compliance of H&S in accordance with best practice and legal requirement.

4. Ad hoc

- The role may include other reasonable duties/tasks from time to time.

Key Interfaces

- Other R&D department engineers to share opinions and problems
- Customers
- Sales
- Management team

Person Specification

Factor	Essential	Desirable
<u>Qualifications</u>		
Degree in Software engineering or related field	Y	
<u>Experience</u>		
Experience in a manufacturing environment		Y
An understanding of camera and systems		Y
<u>Knowledge</u>		
C++	Y	
Win32 API	Y	
Python	Y	
Bitbucket	Y	
<u>Personal Skills & Abilities</u>		
Excellent verbal and written communication skills	Y	
Data analysis and results presentation experience	Y	
Hands-on working with high attention to detail	Y	
Strong Problem Solving skills	Y	
Excellent personal organisation	Y	
Dynamic, positive, enthusiastic and possesses the ability to think laterally and act through reasoned decision making	Y	
Ability to work productively, efficiently and effectively with initiative and drive under tight timescales and pressure whilst maintaining attention to detail and quality	Y	
Willingness to learn, improve and adapt	Y	

I have read, understood and accept my job description as detailed;

Signed:

Name in Capitals:

Dated: