

Software Engineer

INTRODUCTION

Nearfield Instruments (NFI) brings together the most creative minds in science and technology to develop a revolutionary high throughput atomic force microscopy system enabling atom-scale resolution 3D metrology at industry-level throughput, based on three pillars:

- Unrivaled measurement speed;
- Parallelization capability;
- Advanced measurement modes.

At NFI, we design, develop, integrate, market and service these advanced metrology machines, which enable our customers - the world's leading chipmakers – to increase the production yields, and thus, functionality of their microchips, which in turn leads to smaller, more powerful consumer electronics. We aim to develop leading edge metrology systems, to be installed at the customer site, within specifications, on time, with quality exceeding the customer's expectations.

WHAT WILL YOU BE DOING?

For these systems we develop, test, integrate and qualify the entire software stack, from low level embedded control to high level user interface and communication with the factory. A software control framework is under development and we are looking for software engineers to help in designing, writing and testing significant components in the framework. You will also be responsible for integrating and qualifying these components as well as those parts of the stack that are developed by our partners. Next to control software functions also complex algorithms need to be designed and implemented for data reduction and image recognition.

We are looking for a software engineer with the following responsibilities and tasks:

- Reviews requirements for several subsystems;
- Reviews designs for subsystems, especially check if the designs comply to the chosen architecture and facility interfaces and “standards”;
- For some selected subsystems translates those requirements to design;
- Writes and tests the software for several subsystems;
- Designs, codes and tests software for test setups;
- Troubleshoots for selected subsystems and test setups in case of failure;
- Creates the proper documentation during this development process;
- Works closely with the software system architect;
- Interfaces with subsystem designers and the internal customers.

WHAT DO WE REQUIRE OF YOU?

The Software Engineer we seek has at least 5 years of experience in complex data process (analysis and transformation) algorithms, real time software, operating systems and GUI, preferably in the Semiconductor industry.

Furthermore, you need to recognize yourself in the profile as described below.

You have:

- Master degree informatics or technically oriented study with 5 years' experience in an equivalent role. It is a plus if you have experience with mechatronic systems.
- Knowledge with complex data processing algorithms, real time software and operating systems
- Experience with C# and Python.
- Experience with application layers, e.g. communication through the HAL layer, system application software, calibration software, performance and diagnostics software, error handling software, safety procedures, data acquisition and logging, retrieval and transmission, simulation modes.
- GUI layer, including but not limited to recipe handling and processing by operator or through an automated interface, communication with operator, user/operator procedures, production and service / test / diagnostics modes, service & maintenance procedures, data visualization
- Experience with delivering according a given architecture
- Experience with Continuous Integration and Configuration Management processes
- Direct experience in delivering software to customers.
- Experience working in a multi-disciplinary and fast-moving engineering environment, being in contact with customers, suppliers and the other engineers at our company.
- Demonstrated to be a "team player" with strong interpersonal skills and a quality orientation.
- The ability to quickly acquire technical knowledge from documentation and on-the-job training and be capable of thoroughly investigating technical issues (analytically and hands-on in a lab or cleanroom environment).
- Strong written and oral communication skills and a commitment to achieving results on time.
- A good command of the English language, both written and spoken.

HAS THIS VACANCY AROUSED YOUR INTEREST?

Then please feel free to apply on this vacancy! Nearfield Instruments offers an exciting, fast-paced working environment where you will be able to shape the system and the company.

For further questions don't hesitate to contact us.

Send your application to:

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