



Software Engineer | Semiconductor Manufacturing Equipment

Job Information

Hiring Company

[Quest Global Japan Corporation](#)

Job ID

1618665

Industry

Automobile and Parts

Company Type

Large Company (more than 300 employees)

Non-Japanese Ratio

Majority Japanese

Job Type

Permanent Full-time

Location

Tochigi Prefecture, Utsunomiya-shi

Salary

Negotiable, based on experience

Work Hours

According to company regulations.

Holidays

2-day weekend system (Saturday and Sunday)

Refreshed

October 21st, 2026 18:20

General Requirements

Minimum Experience Level

Over 1 year

Career Level

Mid Career

Minimum English Level

Business Level

Minimum Japanese Level

Native Level

Minimum Education Level

High-School

Visa Status

Permission to work in Japan required

Job Description

«Job Overview & Key Highlights of the Position»

- Lead the development, maintenance, and enhancement of software for semiconductor manufacturing equipment using C/C++ in a Linux environment.
- Gain hands-on experience with cutting-edge technologies adopted by leading global semiconductor manufacturers, contributing to next-generation semiconductor production.

- Collaborate with global engineering teams to strengthen expertise in system design, advanced debugging techniques, and high-performance software development.
- Enjoy 120+ days off per year, a five-day workweek with weekends off, online internal training, and the possibility of transitioning to a hybrid work arrangement in the future.

【Project Overview and Responsibilities】

In this project, this position will be responsible for the development, maintenance, and enhancement of software for advanced semiconductor manufacturing equipment and related systems. Centered on C/C++ development in a Linux environment, you will be involved end-to-end in the process from requirements definition to implementation, testing, and defect resolution. You will also engage in system understanding and improvement through analysis of existing code and reverse engineering. Working in close collaboration with cross-functional teams, you will help drive the development of high-quality software systems.

Key Responsibilities:

- Develop, maintain, and enhance software applications for semiconductor manufacturing equipment and related systems.
- Collaborate with cross-functional teams to understand requirements related to lithography and other wafer process workflows.
- Design, implement, and test software modules using C/C++ in Linux environments.
- Investigate and resolve software defects through debugging and root cause analysis(RCA).
- Analyze existing codebases and system behavior to understand functionality and identify improvement opportunities.
- Support integration, validation, and troubleshooting activities in customer and production environments.
- Prepare technical documentation and participate in code reviews.

■Team Structure :

10 members

■Attractive Points :

- Advanced Technology: Opportunity to work on cutting-edge semiconductor manufacturing technologies used by leading global semiconductor manufacturers.
- Insights into Advanced Systems: Gain deep insights into advanced lithography systems that enable the manufacturing of next-generation semiconductor devices.
- Development experience: Work on complex, high-performance software running on mission-critical manufacturing equipment.
- Skill development: Gain hands-on experience with system-level C/C++ development, Linux platforms, and advanced debugging techniques.
- Global environment: Collaborate with global engineering teams and industry experts in a highly innovative environment.
- Diverse career paths: Career growth opportunities in both technical specialist and leadership tracks.

■What Makes Us Attractive :

Quest Global distinguishes itself by providing engineering services rooted not only in "what" is being done, but also in the "why" behind it. While our core business is engineering, what we are truly creating is a brighter future. For over 25 years, we have tackled some of the world's most complex engineering challenges. Our team—driven by a deep sense of curiosity—employs unconventional approaches to turn the impossible into reality.

【Employment type】

full-time employee

※Trial period: 3 months, no change in duties or benefits

【Salary】

Negotiable based on experience

※Full annual salary system (1/12 paid monthly)

■Overtime allowance

■Salary increment once a year

【Working Hours】

According to company regulations.

【Work Location】

Utsunomiya, Tochigi

※Default is working at office. Hybrid mode may be possible later.

■Measures to prevent passive smoking: Yes (no smoking indoors)

【Vacations】

- Total holidays: over 120 days off per year
- 2-day weekend system (Saturday and Sunday)
- National Holidays
- New Year holidays
- Paid vacation
- Prenatal and post-natal leave
- Childcare leave
- Nursing care leave
- Bereavement leave

*Holidays and vacation days may change depending on the work place you are stationed. Since they are all major manufacturers, most have generous annual vacations

【Welfare】

- Commuting allowance (up to 20,000/month)
 - Equipped with various social insurance
 - Welfare pension
 - Health insurance (Tokyo Information Service Industry Health Insurance Association)
 - Employment insurance
 - Worker's Accident Compensation Insurance
 - Health checkup (health checkup for dependents, medical checkup, gynecological checkup, etc.)
 - Retirement age is 65 years old *No retirement age for positions
 - Referral recruitment system (with benefits)
 - In-house training system (online)
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Required Skills**【Must Have】**

- Strong programming skills in C and C++.
- Experience working in Linux-based development environments.
- Knowledge and practical experience with relational databases (RDBMS) such as PostgreSQL
- Ability to read, understand, and modify existing software code.
- Experience in reverse engineering and code analysis to understand legacy or undocumented systems.
- Design document creation is done using UML, flowcharts
- Good analytical and problem-solving skills.
- Strong communication and teamwork abilities.
- English – Business level
- Japanese – Native or above JLPT N2 equivalent level (Working environment is Japanese)

【Good to Have】

- Basic knowledge of semiconductor manufacturing processes (especially in the following areas)
- Lithography (exposure technology)
- Other general wafer processes
- Experience with debugging tools and techniques, including GDB (GNU Debugger).
- Understanding of software architecture and system-level programming.
- Knowledge and practical experience in software development lifecycle (SDLC), version control systems (Git), and various build tools
- Development and operational experience utilizing tools such as Subversion (SVN), Redmine, VS Code, and Microsoft Office
- Experience in software development for semiconductor manufacturing equipment

【Selection Process】

- Number of Openings: 1
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Company Description