

CYIENT

In-Vehicle Brake ECU Development Engineer

Job Information

Hiring Company[Cyient K.K.](#)**Job ID**

1515956

Industry

Software

Company Type

International Company

Job Type

Permanent Full-time

Location

Kanagawa Prefecture, Atsugi-shi

Salary

Negotiable, based on experience

Work Hours

9:00~18:00（休憩 1 時間） 但し、弊社顧客プロジェクト業務の場合は顧客就業時間とする。

Holidays

土・日・祝 但し、弊社顧客プロジェクト業務の場合は顧客営業カレンダーとする。

Refreshed

July 22nd, 2025 08:00

General Requirements

Minimum Experience Level

Over 3 years

Career Level

Mid Career

Minimum English Level

Daily Conversation (Amount Used: English usage about 10%)

Minimum Japanese Level

Daily Conversation

Minimum Education Level

Bachelor's Degree

Visa Status

Permission to work in Japan required

Job Description

In-Vehicle Brake ECU Development Engineer

Location: Honatsugi

Japanese Level – N3 and above

Responsibilities:

- Develop detailed design specifications for in-vehicle brake ECU systems.
 - Create and validate simulation models using MATLAB/Simulink to evaluate system performance and optimize control strategies.
 - Design and implement control algorithms, including PI control, for precise control of hydraulic valves, motors, and other actuators.
 - Develop embedded software for the ECU, including coding, testing, and debugging.
 - Conduct rigorous testing and validation of ECU functionality, performance, and safety.
 - Analyze test data to identify areas for improvement and optimize system performance.
 - Collaborate with cross-functional teams, including hardware engineers, system engineers, and test engineers, to ensure seamless integration of the ECU into the vehicle.
 - Stay up-to-date with the latest advancements in automotive technology and industry standards.
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Required Skills

Required Skills:

- Strong experience in developing chassis-based vehicle ECUs, particularly brake systems.
- Proficiency in C programming language for embedded systems.
- Expertise in MATLAB/Simulink for simulation and modeling.
- Solid understanding of control theory, including PI control and other advanced control techniques.
- Knowledge of hydraulic systems and actuator control.
- Strong analytical and problem-solving skills.
- Excellent communication and teamwork abilities.
- Fluency in English, both written and spoken.

Desired Skills:

- Experience with model-based design and development.
 - Knowledge of automotive standards and regulations, such as ISO 26262.
 - Experience with tools like CANalyzer, VectorCAST, and other relevant software.
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Company Description