# 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

November 11th, 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.

#### 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.

### Company Description