



## **Job Description**

### **Embedded system developer**

#### **Key Responsibilities**

Development of embedded systems for suborbital space planes in the fields of avionics, ground control systems and other devices. Candidate will be responsible for but not limited to the following tasks:

- Design and develop software and electronics required for avionics and ground control systems
- Modify existing devices and software by improving reliability and adding new features
- Prototype and test devices and software
- Design, support and conduct flight tests
- Collect and analyze data from flight tests
- Assist in systems integration and space plane assembly
- Coordinate with suppliers for outsourced part fabrication and software development

#### **Required/Essential Skills**

- Programming experience for embedded devices in some of the major languages (e.g. C, C++, Python, Ada)
- Experience of electronics engineering, especially circuit design, signal processing, instrumentation and control engineering
- Able to create and modify prototype circuits (soldering proficiency)
- Experience working with FPGAs, single board microcontrollers and microcomputers
- Able to draw and read wiring diagrams and schematics
- Extensive knowledge of communication buses and protocols
- Bachelor's degree from an accredited institution, with concentration in Aeronautical, Astronautical, Aerospace, Automation, Electronics, Telecommunication, or Electrical Engineering

#### **General Skills and Competencies**

- English proficiency (equal or above TOEIC 550, TOEFL iBT 57 points)
- Able to find, analyze and solve problems independently
- Proactive and have flexibility to move and/or support other teams
- Capable of working under pressure and for extended hours when necessary
- Capable of working in fast paced dynamic environment
- Capable of making of and adapting to quick design changes.

#### **Preferred Skills and Experience**

- Master's degree from an accredited institution, with concentration in Aeronautical, Astronautical, Aerospace, Automation, Electronics, Telecommunication, or Electrical Engineering
- Knowledgeable in basics of flight dynamics, mechanisms and avionics of airplanes and rockets
- System simulation experience in e.g. Matlab (Simulink, stateflow)
- General knowledge of CAD, control engineering, radio frequency engineering, antenna systems, flight test experiment.
- Able to craft and build test parts and equipment by hand
- Knowledge of Japanese is not required but useful

**Location**

Hekinan city, Aichi prefecture, Japan. Occasional trip and short term stay may be required.

**Intake process**

Download required application documents on the link below

Fill documents and send to [careers@pdas.co.jp](mailto:careers@pdas.co.jp)

[https://pdas.co.jp/documents/PDAS\\_member\\_documents-set.zip](https://pdas.co.jp/documents/PDAS_member_documents-set.zip)

Candidate that pass document screening will be contacted to schedule interview.

Please address any question to [careers@pdas.co.jp](mailto:careers@pdas.co.jp)

**About PD Aerospace**

PD Aerospace is a space start-up company that was founded in 2007. PD Aerospace is developing a fully reusable space plane equipped with original technology engine (technology successfully tested in 2017). PD Aerospace is currently developing unmanned space plane to cultivate core technology and planned to start commercial manned spaceflight.