



**Subject :** The Mauá Institute of Technology (IMT), São Paulo, Brazil, invites applications for **Embedded Software Engineer** position.

This is a 24-month position (fixed-term contract), beginning as soon as possible, with the possibility of long-term extension that is contingent upon performance and project funding.

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The IMT is one of the most prestigious higher education institutes in the state of São Paulo with national reputation for excellence in engineer training, research and extension projects. Our campus is located in an important industry and technology area in São Caetano do Sul – Brazil's leading city in the Human Development Index (0.862) – which is approximately 13 km from São Paulo city center and 50 km from the coast.

The **PLANetary Transits and Oscillations of stars** (PLATO) is a space mission in European Space Agency's (ESA) Cosmic Vision Program which aims at detecting and characterizing samples of exoplanets and their host stars. PLATO will be launched in 2026, and the Brazilian branch of the PLATO project is supported by Fapesp, under the title: "Brazil in Space: Astrophysics and Engineering". As an Embedded Software Engineer, the successful candidate will be part of a team that works with critical real-time systems in Aerospace-related projects, designing and implementing robust real-time firmware solutions.

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**Main duties and responsibilities**

- Contribute as a key member to the Embedded Software Engineering team, focused on the development of embedded software applications.
- Duties include but are not limited to:
  1. Designing, developing, testing, and debugging software components used for the system.
  2. Using and managing software tools and electronic instruments to troubleshoot and debug embedded systems.
  3. Designing and implementing system interfaces.

**Skills and Knowledge**

- Essential:
  1. Embedded programming experience in C.
  2. Experience in designing real-time embedded systems.
  3. Knowledge of common communication protocols (serial, USB, Ethernet protocols).
  4. Ability to review and interpret software requirements.
- Desirable:
  1. Embedded programming experience in VHDL.
  2. Experience in FPGA/CPLD device programming.
  3. Experience with source-code version control, such as GIT.
  4. Familiarity with common lab equipment to test and debug embedded systems.
  5. Knowledge of at least one common scripting language such as Python.

Remuneration will be in accordance with Fapesp: R\$ 7.372,40 (NET) (<http://www.fapesp.br/3162>). Candidates should send their CV and application letter in English (certificates and reference letters may be sent in Portuguese) as one PDF file to vparro@maua.br with the subject line "2019 Plato - Embedded Software Engineer". Review of applications will begin immediately and continue until the position is filled.