

# PhD position in Distributed Systems at Univ. Grenoble Alpes

**Title:** PhD position in High Performance Data Analytics

**Keywords:** Distributed systems, data analytics, high performance computing, cloud computing, data processing frameworks.

**Contacts:**

- Thomas Ropars (thomas.ropars@univ-grenoble-alpes.fr) – main contact –
- Noel De Palma (noel.depalma@univ-grenoble-alpes.fr)

**Application**

To apply, please send us:

- A detailed CV
- The name and email address of at least two persons that can recommend you

**Location:**

Grenoble Informatics Laboratory (LIG) at Univ. Grenoble Alpes is looking for PhD students in the area of distributed systems. The positions are opened in the Erods research team.

**Important information:**

- Dates: Start in October 2017
- Position funded for 3 years

**Required skills:**

Candidates should have the ability to work independently and be willing to work in a highly competitive environment. Candidates should have some knowledge in operating systems as well as in distributed systems. Good programming skills are also required. Good level in written and spoken English is mandatory.

**Description:**

The students will work in the raising domain of High Performance Data Analytics (HPDA), that is, the ability to take advantage of the computing power of supercomputers to run data analytics workload. HPDA aims at answering two major needs: i) the always increasing demand for computing resources to run data analytics workloads; ii) the huge amount of data generated by scientists using supercomputers that implies using appropriate tools to process them.

Existing frameworks to manage and process large amounts of data are mostly developed in the cloud ecosystem. Moving to supercomputers is highly challenging, mainly because of the major differences compared to cloud systems with respect both to the hardware architecture and software stack. The candidates would focus on the performance and/or usability issues related to the deployment of data processing stacks on supercomputer infrastructures.

The work is to be run in the context of a project involving several academical and industrial partners with application domains related to healthcare, aeronautics and datacenter management.

Students will be working in a very stimulating context. LIG is a worldwide known computer science research lab. The Eroads team includes more than 20 members (professors, PhD students, and engineers) working in different fields related to distributed systems and operating systems.