Internship: Large Language Model fine tuning

Contract type: Internship

Level of qualifications required: Bachelor's degree or equivalent

Function: Internship Research

About the research centre or Inria department

The Centre Inria de l'Université de Grenoble groups together almost 600 people in 22 research teams and 7 research support departments.

Staff is present on three campuses in Grenoble, in close collaboration with other research and higher education institutions (Université Grenoble Alpes, CNRS, CEA, INRAE, ...), but also with key economic players in the area.

The Centre Inria de l'Université Grenoble Alpe is active in the fields of high-performance computing, verification and embedded systems, modeling of the environment at multiple levels, and data science and artificial intelligence. The center is a top-level scientific institute with an extensive network of international collaborations in Europe and the rest of the world.

Context

Are you passionate about working with state-of-the-art language models like GPT-3, customizing the language model to master specific topics and excel in certain tasks? This internship offers an exciting opportunity to contribute to our research and development efforts by studying and fine-tuning large language models. You will work closely with our team of AI experts to explore the capabilities of these models and adapt them for real-world applications.

Assignment

- Conduct a state-of-the-art review of LLMs, fine tuning techniques and evaluation metrics.
- Run experiments on Inria's computer cluster.
- Analyze and interpret data to identify areas for improvement and propose innovative solutions.

Main activities

Observe, learn, think, act

Skills

- Currently pursuing a M1 or master's (M2) degree in computer science, electrical engineering, robotics, or a related field.
- Good programming skills in Python, C++ or similar.
- Familiarity with machine learning, language models, and tools such as PyTorch.
- Solid understanding of mathematics, especially linear algebra and statistics.
- Strong problem-solving skills and the ability to work both independently and in a collaborative team environment.

Benefits package

- Subsidized meals
- Partial reimbursement of public transport costs
- Leave: 7 weeks of annual leave + 10 extra days off due to RTT (statutory reduction in working hours) + possibility of exceptional leave (sick children, moving home, etc.)
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities
- Access to vocational training
- Social security coverage under conditions

Remuneration
General Information

- **Town/city**: Montbonnot
- **Inria Center**: Centre Inria de l’Université Grenoble Alpes
- **Starting date**: 2024-01-01
- **Duration of contract**: 6 months
- **Deadline to apply**: 2023-11-30

Contacts

- **Inria Team**: SED-RAL (DGD-I)
- **Recruiter**: Borkowski Stanislaw / stan.borkowski@inria.fr

About Inria

Inria is the French national research institute dedicated to digital science and technology. It employs 2,600 people. Its 200 agile project teams, generally run jointly with academic partners, include more than 3,500 scientists and engineers working to meet the challenges of digital technology, often at the interface with other disciplines. The Institute also employs numerous talents in over forty different professions. 900 research support staff contribute to the preparation and development of scientific and entrepreneurial projects that have a worldwide impact.

The keys to success

How to apply:

Please send your application including

- Mandatory: Complete CV
- Mandatory: Letter of motivation (at most one page)
- Mandatory: Degrees and lists of grades (translated to English or French)
- Recommended: Name and e-mail address of at most two references

**Warning**: you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.

Instruction to apply

Applications must be submitted online via the Inria website. Processing of applications submitted via other channels is not guaranteed.

**Defence Security**: This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST). Authorisation to enter an area is granted by the director of the unit, following a favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. An unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

**Recruitment Policy**: As part of its diversity policy, all Inria positions are accessible to people with disabilities.