

BASIC INFORMATION

Two postdoc positions in emergent deep net communication

- **Data and project number:** 100% Positions funded by the ALiEN (Autonomous Linguistic Emergence in Neural Networks) project (European Research Council 2020 Advanced Grant nr. 101019291; PE6: Computer Science and Informatics panel), within the European Union's Horizon 2020 research and innovation program through an European Research Council 2020 Advanced Grant (grant nr. 101019291; PE6: Computer Science and Informatics panel).

- **Offer description:**

We are offering two postdoc positions for up to 5 years to work on the ALiEN project in a team of 5-to-10 people, including the PI, other postdocs and several PhD students. Selected candidates will have competitive salaries and enjoy considerable freedom to lead basic research work within the framework of the project.

ALiEN (Autonomous Linguistic Emergence in Neural Networks) is an ERC-funded project investigating spontaneous communication in communities of deep neural networks, with the aim to improve their flexibility in solving complex AI tasks and the interpretability of their behaviour.

The 5-year project will start in January 2022, and it will be run in the COLT group of Pompeu Fabra University (UPF) in Barcelona (Spain), under the supervision of Marco Baroni. Project funds support a considerable investment in a strong computational infrastructure exclusively dedicated to it.

Successful postdocs should have demonstrated the ability to conduct top-tier research in one or more of the following fields: deep learning, natural language processing, computer vision, reinforcement learning. This could be shown, for example, by publications at conferences such as ICLR, ACL or CVPR. They should be curious about deep net behaviour and the universal roots of communication. They should enjoy engaging in long-shot basic research and thrive in an environment that emphasizes friendliness and a good work-life balance over a competitive attitude.

COLT and UPF commit to a safe and inclusive research environment for all of its members. Women and people of marginalized communities are strongly encouraged to apply.

- **Research field:** Computer Science
- **Type of Contract:** Temporary
- **Job status:** Full-time
- **Researcher Profiles:** Recognised Researcher (R2)
- **Hours per week:** 37.5
- **Application Deadline:** Open until position filled
- **Envisaged Job Starting Date:** January 1st 2022 at the earliest
- **How to Apply:** <http://marcobaroni.org/alien/>

REQUIREMENTS

- **Required Education Level:**
 - Main research field: Computer Science
 - Level: PhD or equivalent
- **Skills/Qualifications:**

First-hand research experience in one or more of these fields:

 - Natural language processing
 - Computer vision
 - Reinforcement learning
 - Deep learning
- **Specific Requirements:** Publication record in top-tier conferences and/or journals
- **Required Languages:**
 - Language: English
 - Level: excellent
- **Required Research Experience:**
 - Research field: Computer Science
 - Years of research experience: 1 – 4 years