

## **Research Associate / App Developer – Socially Competent Robotic And Agent Technologies (SCRAT)**

**Position:** Research Associate / App Developer Socially Competent Robotic And Agent Technologies (SCRAT – PEDESTRIAN Project

**Category:** Part Time Employment for the duration of the project. An initial one-year employment contract will be offered with the possibility for renewal depending on performance and project needs.

**Location:** Nicosia, Cyprus

**Preferred Start Date:** June 2022 or as soon thereafter.

**Application Deadline:** Remain open until the positions are filled (relevant to Research Associates)

**CYENS** Centre of Excellence (formerly known as RISE) is the Research Centre of Excellence in Cyprus focusing on Interactive media, Smart systems and Emerging technologies aiming to empower knowledge and technology transfer in the region. It is a joint venture between the three public universities of Cyprus - University of Cyprus, Cyprus University of Technology, and Open University of Cyprus, the Municipality of Nicosia, and two renowned international partners, the Max Planck Institute for Informatics, Germany, and, the University College London, United Kingdom. This project has received funding from the European Union's **Horizon 2020** research and innovation programme H2020-WIDESPREAD-01-2016-2017 (Teaming Phase 2) under grant agreement No. 739578, as well as from the Cypriot Government, local and international partners, and other sponsors.

The Centre conducts excellent, internationally competitive scientific research in the areas of visual sciences, human factors and design, communication, and artificial intelligence delivered by high-calibre multidisciplinary research teams. CYENS engages in knowledge transfer and innovation activities aiming to bridge the gap between scientific research and STEM-led innovation and entrepreneurship.

The research focus of CYENS is on interactive media, smart systems, and emerging technologies. Interactive media have become an integral part of our lives, changing the way that information is conveyed to the user and the ways users interact with devices, with other people, and with the world around them. Smart systems have offered a novel way of producing automated solutions to hard problems for which the mere use of the human intellect is insufficient. Research in CYENS integrates the Visual Sciences, Human Factors & Design, and Communications & Artificial Intelligence, in a tight synergy that provides a unique interdisciplinary research perspective that emphasizes an "Inspired by Humans, Designed for Humans" philosophy. CYENS is designed to act as an integrator of academic research and industrial innovation, towards the sustainable fueling of the scientific, technological, and economic growth of Cyprus and Europe.

The successful candidate will conduct research as a part of the PEDESTRIAN project. The candidate will be working in the **Socially Competent Robotic And Agent Technologies (SCRAT) MRG**, under the supervision of Dr Loizos Michael and will collaborate closely with researchers from the Socially Competent Robotic and Agent Technologies (SCRAT) MRG. Possibility of additional engagement in other projects during the same period, and continuing engagement with the SCRAT MRG after the conclusion of the project.

The project seeks to develop a machine-mediated social interaction application for smart-devices that will allow citizens across Cyprus to reach out for help from others. Each user of the application will interact with the application in their language of choice. A user will be able to create written requests for information or help, and these will be sent by the underlying machine-mediated interaction protocol to other users of the platform who can contribute to the request. The interaction protocol is diversity-aware and is, thus, oblivious to the so-called shallow features of the profiles of the platform users (e.g., gender, age, religion, language). The proposed project will utilize the WeNet platform (<https://internetofus.eu>) and will further enhance its diversity-awareness by developing an automated translation process so that requests sent by one user will be delivered in the language of choice of each recipient of

those requests. In doing so, the proposed project will facilitate the adoption of this technology in multilingual societies, such as that of Cyprus.

**The successful candidate will be responsible for carrying out the below duties and responsibilities:**

- Support with the development of the mobile app (Android, iOS, cross platform).
- Develop technical specifications, perform code reviews, testing and debugging.
- Development of documentation and design, and authoring of project reports.
- Participate in dissemination activities to promote the adoption of the mobile app.

**Required skills and qualifications**

1. Bachelor's degree and postgraduate degree in a relevant field (Computer Science, Computer Engineering, Data Science, Mathematics, Physics, Multimedia) from an accredited institution
2. Experience in mobile app development (Android, iOS, cross platform).
3. Past participation in research / innovation project implementation.
4. Solid knowledge of at least one programming language (e.g., Java, C#, C++).

**Desired skills and qualifications**

5. Knowledge of Machine Learning / Artificial Intelligence tools and techniques.
6. Experience in programming using scripting languages (e.g., Python, Javascript).
7. Ability to use Telegram API / TDLib as part of the development of mobile apps.
8. Knowledge of Machine Translation and NLP tools, resources, and techniques.

**Benefits**

Take advantage of this opportunity for your professional and personal development by being a part of our fast-growing Research and Innovation Centre of Excellence. A very attractive remuneration package will be offered to the successful candidate according to qualifications and experience.

**Application process**

For full consideration, interested applicants should submit the following items via the [online application form](#) and mention the position you are applying for: "Application for PEDESTRIAN Project (SCRAT) *Research Associate / App Developer*":

**Process for Research Associates:**

1. A cover letter which clearly specifies 1) contact details, 2) employment availability date, 3) part-time or full-time availability
2. A detailed curriculum vitae in English.
3. Copies of academic transcripts
4. Description of their academic and research experiences as well as any relevant industrial / innovation / entrepreneurship experience, where applicable (500 words maximum).
5. Contact details of two University professors or one University professor and one industry referee who will provide the letters.
6. Two (2) representative publications (if applicable).
7. Two (2) representative innovation outcomes / products (if applicable).

In case you previously applied for a post at CYENS CoE, a new application is required.

For general enquiries, applicants may contact the HR Department of CYENS, Centre of Excellence at [vacancies@cyens.org.cy](mailto:vacancies@cyens.org.cy).

For more information contact the project coordinator, Dr Loizos Michael, [loizos@cyens.org.cy](mailto:loizos@cyens.org.cy)

CYENS Centre of Excellence is an equal opportunity employer and the position is open to everyone, internationally.

**All applications are treated in the strictest confidence.**

### **ABOUT CYENS CoE**

CYENS Centre of Excellence is a Centre of Excellence in Research and Innovation on Information and Communication Technologies in Cyprus, aiming to empower knowledge and technology transfer in the region. It is a joint venture between the three public universities of Cyprus - University of Cyprus, Cyprus University of Technology, and, Open University of Cyprus- , the Municipality of Nicosia, and two renowned international partners, the Max Planck Institute for Informatics, Germany, and, the University College London, United Kingdom.



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