

Position: Doctoral Research Fellowship (PhD)**Project:** Big dAta aNAlYtics for radio Access Networks (BANYAN)**Host organisation:** Ranplan Wireless Network Design Ltd, Cambridge UK**Academic partner:** The University of Cambridge, Dept. of Computer Science and Technology**Duration:** 3 years (subject to probation period)**Closing date:** 4 April 2020**Salary:** £38,500 per annum (inclusive of mobility allowance)**Summary**

This doctoral research fellowship (PhD) programme will be carried out within the framework of a Marie Skłodowska-Curie Actions – Innovative Training Network (ITN) – European Industrial Doctorates (EID) project funded by the European Commission, under their H2020 program.

Two, 36-month duration Doctoral Research Fellows are available to start as soon as possible. Successful candidates will be recruited by Ranplan and following satisfactory completion of the first year of study will be registered for PhD at the University of Cambridge Department of Computer Science and Technology.

Through the project activities, the Doctoral Research Fellows will have the opportunity to meet and to collaborate with some of the leading European research groups in data analytics, AI/Machine Learning in the context of 5G network slicing. Note that English is the official language of the BANYAN project.

Female candidates are particularly encouraged to apply.

Eligibility Criteria

Candidates must meet all the criteria listed below:

- (1) Be in the first three years (full-time equivalent research experience) of his/her research career and not have a doctoral degree at the time of recruitment by the host organisation. Full-Time Equivalent Research Experience is measured from the date when the researcher obtained the degree entitling him/her to embark on a doctorate (either in the country in which the degree was obtained or in the country in which the researcher is recruited, even if a doctorate was never started or envisaged. However, full time spent on non-research related activities may be discounted, where each case is evaluated on its own merit.
- (2) At the time of recruitment by the host organisation, must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12 months in the 3 years immediately prior to the reference date. Short stays such as holidays and/or compulsory national service are not taken into account.
- (3) Prior to starting their position, the successful fellows must have completed the courses that would have allowed them to enrol in a doctorate program either in the country where they are studying or in the country offering the position.

Duties

- (1) Perform high quality research in the bespoke research project under the guidance of the supervisory team.
- (2) Meet the members of the supervisory team on a regular basis.
- (3) Participate in the activities of the Innovative Training Network as specified in the Grant Agreement and/or required by the node coordinator, including secondments in other network nodes and taking part in the network meetings and in the training activities.
- (4) Write up the results of the research activity and present research papers and publications at meetings and conferences, as advised by the supervisors.
- (5) Widen the personal knowledge in the research area and undertake complementary training.
- (6) Keep records of the activities, such as research, training, secondments, visits, leave of absence, etc.

Background and Skills

- (1) An excellent academic record in communications engineering, mathematics, physics, computing, data analytics, artificial intelligence (AI), machine learning (ML) or related areas.
- (2) A keen interest in pursuing research in data analytics, AI/ML in the context of proactive network optimisation and 5G network slicing.
- (3) The ability to work independently and as a member of a research team.
- (4) Excellent interpersonal and communication skills.
- (5) A good command of English language, with excellent oral and written skills.

Desirable characteristics

Any of the following are desirable.

- A demonstrable ability or potential to produce research published in peer-reviewed journals.
- A good strategic fit with existing research expertise in the host institution
- Knowledge of, or willingness to learn, the language of the host institution.

Further Information

The Banyan project beneficiaries are; Ranplan Wireless Network Design Ltd (Cambridge, UK), IMDEA Networks (Madrid, Spain) and CNR (Torino, Italy). The Banyan project partners are; Orange Labs (France), and the University of Cambridge (UK).

Enquiries

Informal enquiries may be made to Professor Jie Zhang ([jje.zhang@ranplanwireless.com](mailto:jie.zhang@ranplanwireless.com)), Ranplan Wireless, and/or Dr Ian Wassell (ijw24@cam.ac.uk), the Department of Computer Science and Technology, University of Cambridge.

Also see, <https://ranplanwireless.com/careers/>