

INTERNSHIP OPPORTUNITY – CALL FOR APPLICATION Development of a Tool That Produces Canvas Documentation

1. Internship Number:	101008548-2
2. Contract Type:	Internship
3. Level:	In the process of finalising an undergraduate degree Or in the process of reading for a master degree (Level of internship may vary according to the level of the candidate)
4. Location:	CNAO – Centro Nazionale di Adroterapia Oncologica, Pavia, Italy
5. Field:	Physics/Engineering/ICT – Programming and Control Systems
6. Mode:	Full Time
7. Duration:	about 16 weeks
8. Possible Date Window:	between September and December 2022
9. Grant:	There are two types of internships available: Type A: Funded at €2000 per month plus €300 for travel Type B: Internship funded by the applicant or by third parties Candidates are to indicate whether they are applying for Type A, Type B or both.

10. Description:

CNAO is one of the four unique cancer treatment facilities in Europe that use proton and carbon ion therapy for cancer treatment. Such therapy makes it possible to irradiate tumours in places that are difficult to reach with minimal effect to surrounding healthy tissue hence significantly reducing side effects. CNAO offers a unique international state-of-the-art working environment built around a particle accelerator which is used for therapy and research.

A toolkit for automatic code generation starting from application models has been built in the last years and a JSON specification document is the source of the code being generated. Our goal is to exploit the same JSON specification file to generate documentation for quality assurance and user's manuals. A research project which is planned to end in June 2022 has the goal of defining the specifications for this documentation tool.

The proposed work of this internship consists in the development of the tool that produces a canvas documentation starting from the specifications supplied by the research project. The canvas documentation then shall be completed by the application developers keeping the manually written part in a database. The tool shall enable the strict alignment of the documentation to the application being built and shall enable the verification of the completeness of the documents to be produced and the basis of a pre-defined quality assurance framework.

11. Candidate Tasks, Duties, Responsibilities:





The candidate shall develop the programs that produce the documentation of an application starting from a specification file written in JSON. The specification of the programs shall be supplied as a result of a previous work

12. Candidate Eligibility:

For grant funded internship Type A:

- Candidates with EU member state citizenship
- Candidates from organisations/universities located within EU member states

- Candidates with citizenship of at least one of the following countries: Iceland, Norway, Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, Turkey, Israel, Moldova, Switzerland, Faroe Islands, Ukraine, Tunisia, Georgia, Armenia.

- Candidates from Kosovo**

For student funded internship Type B:

- All candidates eligible for Type A internships
- All other international applicants

13. Candidate Requirements:

The skills the candidate should have are the following:

- 1) Good knowledge of MS Visual Studio and C#
- 2) Good knowledge of JSON syntax
- 3) Good Knowledge of a database management system (Sqlite or MySQL)
- 4) If possible knowledge of a .NET library to manipulate MS Word documents

14: Submission Details:

Interested candidates are to submit the following:

- a. A motivation letter
- b. A Curriculum Vitae
- c. Degree transcripts to date
- d. Referee Contact Details

e. Valid Covid-19 vaccination certificate. If this is not available at the application stage, candidates may opt to submit it at the interview stage. This should be indicated in the motivation letter.

*NB: A limited number of candidates will be awarded an internship which includes a grant and a limited number of candidates will be awarded a position that does not include a grant. Candidates are to indicate in their motivation letter whether they are applying for a grant internship or a non-grant internship or both. To note that also applying for a non-grant internship does not reduce a candidate's chance of obtaining a grant internship but simply opens the candidate to more possibilities of obtaining an internship position. Candidates who are selected for non-grant internships will be asked to sign a declaration that they can cover their own expenses during the internship.

*NB: Health and disability death insurance will have to be taken care of directly by the candidate.

**This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.'

15: Submission Deadline:

Wednesday 5th January 2022





16: Submission Contact:

Submissions are to be sent by email to: <u>nicholas.sammut@um.edu.mt</u> Submissions are to clearly state the internship number and internship name in the email subject line and in the motivation letter

17: Remarks:

Only shortlisted candidates will be contacted and advance to the next stage of the selection process.

Individuals engaged under such internship contracts will not be considered "staff members" under the Staff Regulations and Rules of the organisation policies and procedures, and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their internship contract and the general conditions of contracts for the services of consultants and individual contractors. Interns are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.

