

Augmented Cities: C-TECH Summer Camp

CONTEST RULES

FRAMEWORK

A summer camp, hosted by NOVA Cidade – Urban Analytics Lab, and participate in the MIT Portugal C-Tech project (Climate Driven Technologies for Low Carbon Cities), where you will have a hands-on learning experience in augmented reality challenge to develop a real smart sustainable city augmented reality (AR) application in a team project using Unity and HoloLens 2.

CHAPTER I - OBJECTIVE

The summer camp's main goal is to introduce students to augmented reality field inserted in the theme of data, and storytelling with data in Smart Cities. The students are expected to have a hands-on learning experience in augmented reality challenge and to develop a real smart sustainable city AR application, in a team project, using the Unity software and HoloLens 2.

CHAPTER II - ELIGIBILITY

Only university students are eligible. A maximum of two (2) to three (3) students, per team. International and exchange students may participate in the Challenge provided they are officially enrolled at a university at the time of registration and thorough completion of all aspects of the Summer School.

CHAPTER III - WORK SPECIFICATIONS

Participants must develop a real smart sustainable city augmented reality application and a pitch of their application for the afternoon session, on the 9th of September. The team may use computers, software packages, books, reference works, internet resources, or any other inanimate sources, all of which must be properly referenced within the solution paper. A team's complete submission will become property of C-TECH Project and NOVA IMS. The team members agree to permit C-TECH Project and NOVA IMS to use any information contained in their entry for publicity or educational purposes in any media, or for any purpose deemed relevant. The Finalists Teams ("Phase One") will be invited to present their solution, in a *pitch format* for the final confirmation phase of judging ("Phase Two") on September 9 in the afternoon. A pitch by the entire team is a requirement for winning the prize. Barring unforeseen events, the location of the final event is at NOVA IMS, Campus de Campolide, Lisboa. Teams that are unable to present their solutions or are unable to have all members present for the final event, are not eligible for the prize. Exceptions may be made for medically documented reasons but are at the discretion of the organizers.

CHAPTER IV - JURY

The judging of the Challenge will proceed in two phases, as follows:

(a) In the first phase (“Phase One”), a panel of judges comprised of Sponsors’ employees and members of the project consortium will review the paper solution to identify those that are complete and otherwise appear preliminarily to satisfy the entry requirements. Submissions that appear preliminarily to be complete and to satisfy the entry requirements will be included in Phase Two of the judging.

(b) In the second phase (“Phase Two”), a panel of judges designated by the project consortium will review and score all Submissions included in Phase Two based on the following criteria, which will be engaging city stakeholders (extent to which the solution keep researchers and city stakeholders fully engaged or, appear likely to do so); and innovative/creative vision (uniqueness of the concept).

All decisions made by the judges are final and are not subject to challenge or appeal.

Preparation of Solution Paper Submission

CHAPTER V - Format

Solution papers must be submitted in English. Papers must be submitted as a PDF file, no longer than 20 single-sided pages. Judges request a minimum font size (12) and minimum 1" margins (all around). Each page of the solution paper must contain the team's ID # and page number in the header at the top of the page. For example: Team # 12345, page 1 of 15. The Challenge organizers will convert any non-PDF submission to PDF; but we cannot guarantee the file integrity after this process. Teams should create their PDF and do final review before submitting. A solution paper must be contained in a single file upload. Charts, tables, and other graphics must be embedded into the PDF document. Supplemental files should be uploaded with the solution paper.

CHAPTER VI - Content

Organization, conciseness, and clarity of the solution paper are critical. Provide only your team ID #. Do NOT include your University/Course name, any student names, or any other identifying information in your solution paper. The solution paper should answer all questions posed and have the following elements:

SUMMARY of results must be at the first page of the solution paper, clearly identified and not more than one page. It should be a concise, straightforward explanation of the main results and answer the questions posed, written with minimal use of technical language. Judges will not read past a poorly written summary.

The paper should also include:

RESTATEMENT of the problem, and JUSTIFICATION of all assumptions.

ANALYSIS of the problem, DESIGN of the AR solution, and JUSTIFICATION of the AR solution used.

DISCUSSION of how the solution can be tested.

APPENDIX, if necessary.

CHAPTER VII - Citations

Give credit where credit is due. A list of all references used should be placed at the end of the paper; any consistent citation style is allowed. When a quote, figure, equation, statistic, paraphrased idea, insight, or any other information from a source is used in the solution paper, it should be marked with an in-text citation (e.g. a reference number [3], author + year [Neto 2021]).

CHAPTER VIII - Submission

You may upload versions of your solution paper at any time from the start of the Challenge time until the deadline. If you upload more than once, your most recent upload will entirely replace any previous versions and will become your submission of record – the last upload before your time expires is the submission on which you will be judged. No supplemental materials will be accepted once you have submitted the final solution paper. If your upload attempts are problematic, as a last resort you may email it as an attached PDF file. If your work time expires while you are trying to upload your solution, email it IMMEDIATELY to novacidade@novaims.unl.pt with your team # in the subject line.

Partial solutions are acceptable

Creativity, good work, and acknowledging where you fall short and what you would have done with more time is valued. The judges are particularly interested in each team's approach and methods. Judges will read, score and (most often) provide feedback and comments on partial solutions. Even if you feel you did not complete or get far enough, submit it.

CHAPTER IX - Authenticity

By uploading a solution paper during Challenge, you are guaranteeing that the work is completely your own. All suspected instances of plagiarism will be taken seriously and investigated. Plagiarism will result in disqualification. The Challenge checks submissions for possible plagiarism.

CHAPTER X – EVALUATION CRITERIA

Main Criteria Points:

- Information about the problem in the context of Smart Cities.
- Usage of Augmented Reality in a meaningful way to tackle the problem.
- How does your project solve the problem (value proposition)?
- Who will benefit from it and why?
- What's next in terms of project development?

Additional Criteria (encouraged details that may come during Q&A):

- Mention of a long-term solution.
- Competition and competitive advantage versus classical approaches.
- Potential for growth and scalability or commercialization potential of the idea.
- Told a story (not a list).
- Provided examples.
- Spoke clearly, used easy to understand language.
- Relates to audience.
- Enthusiastic, passionate about the idea, full of energy.

CHAPTER XI - PRIZE

The winning team will receive 1.500 EUR in a gift certificate.

CHAPTER XII - INTELLECTUAL PROPERTY RIGHTS

Contestants transfer to the C-TECH project the copyright on all the work they submit within the scope of this contest, for reproduction on the project's website and other documents or networks deemed relevant to the visibility of the project's activities.

CHAPTER XIII - GENERAL PROVISIONS

The works will be admitted to the contest if they respect the present regulation. Any clarifications should be requested by e-mail to novacidade@novaims.unl.pt.