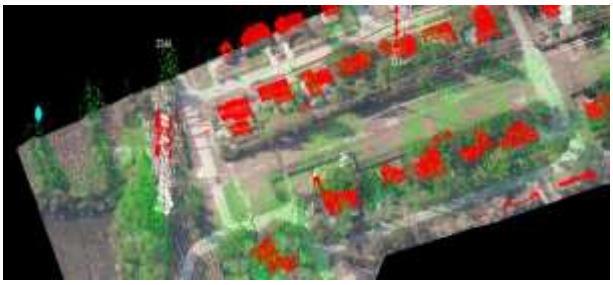
BENTLEY ACADEMIC REALITY MODELING DESIGN COMPETITION : COMPETITION STATEMENT

REALITY MODELING DESIGN COMPETITION

Around the world, engineers, architects, constructors and owner-operators are using Bentley's software solutions to accelerate project delivery and improve asset performance for the infrastructure that sustains our economy and our environment. Together, we are advancing infrastructure.

With ContextCapture, you can produce even the largest and most challenging 3D models of existing real-world conditions, including scales as large as entire cities, from simple photographs, in order to easily and quickly provide context for design, construction, and operations decisions for all types of infrastructure projects throughout the world.

Advancing Reality Modeling



Add real-world imagery to your infrastructure projects. Capture, process, or reuse existing site condition data with our 3D imaging and point-cloud processing software. Streamline capture-to-model workflows, eliminate time-consuming translations, and accelerate image and point-cloud data performance to add accurate real-world imagery to your projects.

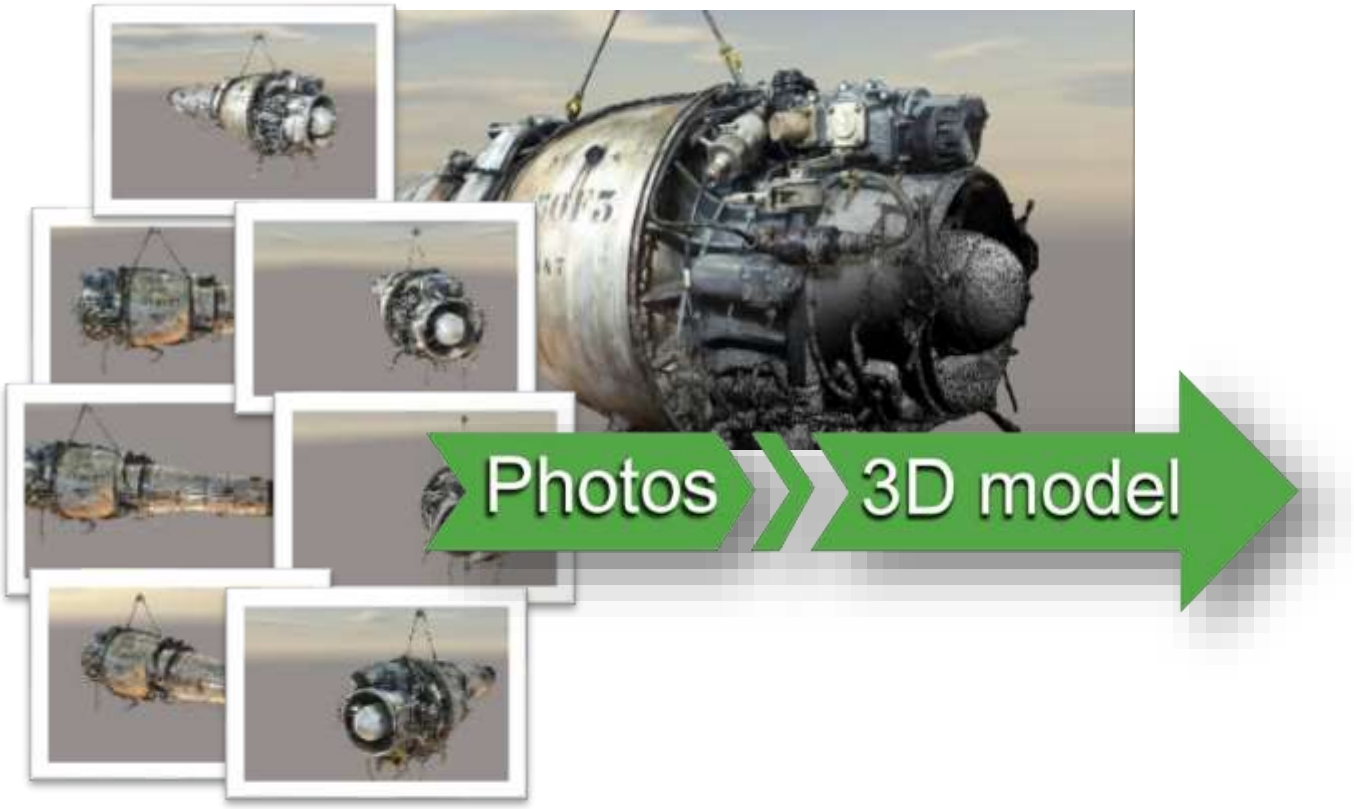
For more information on Bentley Reality Modeling Products visit: Bentley Reality Modeling

REALITY MODELING DESIGN COMPETITION

Competition Statement:

Select an Area of Interest in your campus, preferably outdoors.

A typical example would be – ***Decorative Fountain or Statue near your Main Campus Building or a Small Lawn/Badminton or Volleyball court.***

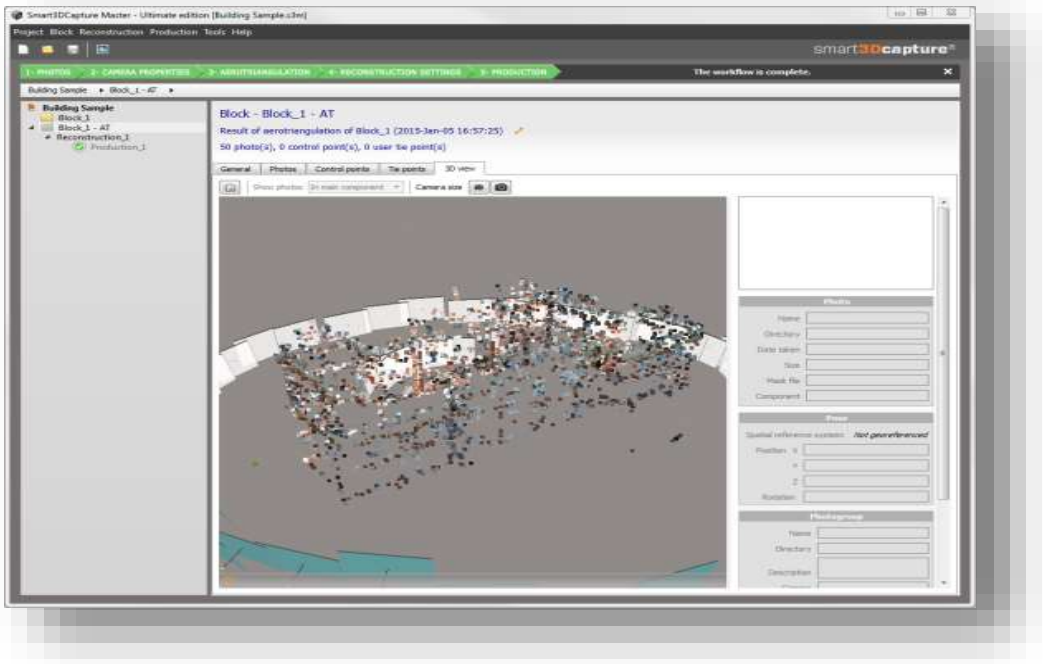


Participation:

Interested candidates may submit their registration to take part as an individual or group of maximum 2 students.

Project Tasks:

- Using a smartphone or a Digital SLR camera, take a series of photographs with sufficient overlap of the entire area of interest. Use of a GPS enabled camera is highly recommended (some smartphones have it in-built). Determine your camera model and its specifications.
- Using a measuring tape/scale, estimate the length of any object or segment in your area of interest and make a note of it.
- Using **Bentley *ContextCapture*** [i]software, create a 3D Model of your area of interest by performing
    - Aero-Triangulation



    - Generation of fully rendered 3D Model in standard format of the software (.3MX)
- Use ***ContextCapture Viewer*** [ii]to view the model, use Measure Distance/Area/Volume Tools within the viewer to estimate lengths, areas & volumes of some features in your Area of Interest. Check if the distance measured earlier of the real object is same as your 3D model. If not, use corrective measures to regenerate the model so that the ground distance matches the model length.

Design Submission:

Submit your model in the .3MX format and details of your Area

***Tips**:*

- *Make sure your area of interest could be completely taken by a series of photographs without any obstructions*
- *Make sure your area is devoid of plain water surfaces or glass/mirror surfaces*
- *Use of different camera views of your area with variable heights is recommended and so taking photographs from higher level as well as ground level is better but not mandatory*

Judgement Criteria:

- Candidate has to present a 3 slides presentation which will be based on their respective workflow.
- Working file is mandatory
- Team who will come close to fulfilling the criteria will be chosen as the WINNER of the competition which on effort driven activity.

(Criteria: Generation of fully rendered 3D Model of the object in standard format of the software)

Award:

Winner Team – **Rs. 5000/-**
1st Runner Up Team – **Rs. 3000/-**
2nd Runner Up Team – **Rs. 2000/-**

[i] ***Contact Event ADMIN to access the mentioned software and technical manual.***