

(425) Computer Modeling (S)

Description

Given a scenario or prompt, Computer Modeling will research the topic, create a profile, concept design(s), prototype(s), and final model and/or scene based upon the assigned topic provided. For example – a new Pixar[®] type character made of metal (refer to background information supplied about character); an opening scene to support a new sci-fi movie; an office chair designed for the year 2050; an environment for a Mars colony in the year 2075, etc.

Eligibility

Any student member may enter this event. Contestants participating in the national level competition must be registered for the event prior to submission deadline for technical judging. Contestants must participate in both parts of the competition in order to be ranked.

Topic

Design a new locomotive for the Grapevine Vintage Railroad that can be used for web based marketing. For information on the Grapevine Vintage Railroad, please visit:

<https://www.grapevinetexasusa.com/grapevine-vintage-railroad/>

Contestants who do *not* submit an entry following this topic will be *disqualified*.

Contestant must supply

Visual display technology in the form of, but *not* limited to, a desktop/laptop with internal or external speakers, projector, TV and DVD player

Video projector (optional)

Props (optional)

Carry-in and set-up of equipment must be done solely by the individual and must take place within the time allotted

No Internet access will be provided on-site at NLC; however, contestants may provide their own access to be used only for their presentation to the judges

Contestant must bring all supporting devices (e.g., extension cords, power supply, etc.)

Business Professionals of America assumes no responsibility for hardware/software provided by the contestant. No equipment, supplies, or materials other than those specified for an event will be allowed in the testing area. No previous Business Professionals of America tests and/or sample tests or facsimiles thereof (handwritten, photocopied, or keyed) may be taken into the testing area. Violation of this rule will result in disqualification.

Competencies

- Develop a profile for a given character, environment, or non-organic object within the specified parameters.
- Demonstrate development of model through research, concept art, and prototypes.
- Demonstrate application of finishes and lighting, and texturing techniques.
- Make formal geometric constructions with a variety of tools and methods.
- Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
- Apply geometric methods to solve design problems.
- Apply knowledge of software, equipment, and skills related to 3D art generation.
- Utilize research skills; research to build and present knowledge.
- Demonstrate artistic techniques to support a clear scenario or prompt.
- Demonstrate knowledge of copyright laws.
- Demonstrate professional presentation skills.
- Demonstrate work skills needed to function as a 3D Artist.

Specifications

- This is a pre-submitted event. See instructions for submissions.
- The individual will research the topic, including reference information provided in prompts, the time era, trends to support design, etc., and from that information will develop a profile to be submitted along with assets to be generated. The profile should *not* exceed one (1) page and should provide the artist's vision for the project, and the rationale for the submission.
- The individual will use digital tools, i.e., cameras, writing tablets, etc., for researching, planning, development and/or revision of content for model(s).
- The individual will develop the concept design(s) for the submission.
- The individual will produce 3-D Models.
- The individual will develop a final model and/or scene, including the application of color, textures, lighting, etc.
- Graphics developed should accurately depict and/or increase dramatic or entertainment value of scenario or prompt given.
- The final project components, including, but *not* limited to, concept art, the profile, screenshots, and model project files, should be compressed in zip format and uploaded to a video/file sharing site (e.g. Dropbox, etc.).
- For completed projects uploaded to a video/file sharing site (Vimeo, YouTube, or Dropbox, etc.), it is recommended to set the access level of your project to one of BPA's recommended settings. See page 15 for settings recommendations.
- Submit the [Individual Entry Form](#) including the URL to the project and [Release Form\(s\)](#) in a combined PDF file to: <http://www.bpa.org/submit> no later than 11:59 p.m. Eastern Time on April 1, 2018.
- Note: Member ID will be required for all submissions.
- Contestants will receive an automated response confirmation at the time of submission.
- Individual confirmation of receipt *cannot* be provided by the National Center.
- No fax or mailed copies will be accepted.
- No exceptions can be made for missed deadlines due to an incorrect e-mail address for submission or technical difficulties.
- Multiple submissions *cannot* be accepted.
- Materials from non-registered contestants and/or those missing contestant numbers *cannot* be accepted.
- No changes can be made to the project after the date of submission.
- One (1) copy of the [Individual Entry Form](#), including signatures, [Release Form\(s\)](#) and any concept art/prototypes must be submitted at the time of the presentation at NLC at both the Preliminary and Final Competition.
- Must be viewable on both Windows and Mac platforms.
- The individual may utilize hand-drawings and sketches, computer drawings, text, graphics and/or illustration applications, 3-D modeling applications. (Note: hand-drawings and sketches should be scanned to attain a digital format.)
- The length of the presentation will be not more than ten (10) minutes, followed by no more than five (5) minutes of judges' questions.
- All text/graphics materials must follow the organization's [Graphic Standards](#) and make proper use of the logo and/or organization's name, if used. (Refer to the [Graphic Standards](#) in the [Style & Reference Manual](#).)
- It is the policy of Business Professionals of America to comply with state and federal copyright law. Federal law pertaining to copyright, as contained within the United States Code, is available at <http://www.copyright.gov/title17/circ92.pdf>. The [Style & Reference Manual](#) contains guidelines for Copyright and Fair Use. Participant(s) will be *disqualified* for violations of the guidelines.

- National Business Professionals of America grants permission for the use of the copyrighted logo and tagline.
- All materials, other than the required submission materials may *not* be left with judges.

Method of evaluation

Judge's Scoring Rubric

Length of event

No more than three (3) minutes for set-up/wrap-up

No more than ten (10) minutes for the presentation

No more than five (5) minutes for judges' questions

Finals may be included at regional, state and national levels

Entries

Each state is allowed three (3) entries

Contestants in all judged who wish to receive judges' comments must submit a self-addressed, stamped envelope to the event judges before judging takes place.

Materials submitted for technical judging will *not* be returned and will *not* be available at NLC.

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Judge Number _____

Contestant Number _____

Technical Scoring Rubric

Contestant Violated the Copyright and/or Fair Use Guidelines	<input type="checkbox"/> Yes (<i>Disqualification</i>)	<input type="checkbox"/> No
If yes, please stop scoring and provide a brief reason for the <i>disqualification</i> below:		
Contestant followed topic	<input type="checkbox"/> Yes	<input type="checkbox"/> No (<i>Disqualification</i>)

Items to Evaluate	Below Average	Average	Good	Excellent	Points Awarded
Contestant submitted the correct information and in the correct format. <ul style="list-style-type: none"> • Individual Entry Form (must be keyed but does <i>not</i> have to be signed for pre-submission) AND Release Form(s) (must be keyed but does <i>not</i> have to be signed for pre-submission) in one combined PDF file <i>All points or none are awarded by the technical judge.</i> 				10	
Complexity/Craftsmanship					
Profile (<i>not</i> to exceed 1 page) Developed from research following prompt Goals and artistic vision developed for scene/model Provides rationale for submission Portrays personality, era, appropriate details	1-5	6-10	11-15	16-20	
Grammar, Spelling, Punctuation, and Usage Content without errors	5 (3+ errors)	10 (2 errors)	15 (1 error)	20 (0 errors)	
Concept Art developed to support prototype	1-5	6-10	11-15	16-20	
Innovative use of technology, advanced techniques	1-5	6-10	11-15	16-20	
Model/Scene is realistic and/or supports goals Model/Scene completed according to established goals for project	1-5	6-10	11-15	16-20	
Materials, Lighting, and Finishes support project plan with consistency	1-5	6-10	11-15	16-20	
Final model shown at a variety of angles/views	1-5	6-10	11-15	16-20	
Accuracy and/or attention to detail was evident	1-5	6-10	11-15	16-20	
Graphics developed are original and depict and/or increase dramatic or entertainment value of scenario or prompt given	1-5	6-10	11-15	16-20	
Total Complexity/Craftsmanship (180 points maximum)					
Composition					
Execution of Plan Depth of research Goals/Concept Art/Prototypes developed and shared	1-5	6-10	11-15	16-20	
Artistic Layout/Design Principles Aesthetic consistent use of colors, textures, lighting, and finishes	1-5	6-10	11-15	16-20	
Total Composition Points (40 points maximum)					
Creativity					
Work is original Fresh ideas, innovative, unique	1-5	6-10	11-15	16-20	
Model/Scene effectively fulfills project goals	1-5	6-10	11-15	16-20	
WOW factor! Model/Scene exceeds expectations	1-5	6-10	11-15	16-20	
Model/Scene is visually appealing, has personality, matches profile, and fits prompts/scenario	1-5	6-10	11-15	16-20	
Total Creativity Points (80 points maximum)					
TOTAL TECHNICAL POINTS (310 points maximum)					

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Judge Number _____

Contestant Number _____

Presentation Scoring Rubric

Items to Evaluate	Below Average	Average	Good	Excellent	Points Earned
Ability to explain the development process	1-5	6-10	11-15	16-20	
Ability to explain the design process	1-5	6-10	11-15	16-20	
Ability to explain the use of innovative technology	1-5	6-10	11-15	16-20	
Ability to explain use and development of media elements	1-5	6-10	11-15	16-20	
Presentation quality/style	1-5	6-10	11-15	16-20	
TOTAL PRESENTATION POINTS (100 points maximum)					

Props and/or additional items shall not be used as a basis for scoring.

Specification Scoring Rubric

SPECIFICATION POINTS: All points or no points per item are awarded by the proctor per contestant, <i>not</i> per judge.	Points Awarded
Set-up lasted no longer than three (3) minutes – 5 points Presentation lasted no longer than ten (10) minutes – 5 points	10
Documentation submitted at time of check-in: keyed and signed Individual Entry Form (1 copy), Concept Art/Prototypes (1 copy), and Release Form(s) (1 copy) at time of presentation <i>Must have copies for preliminaries and finals</i>	10
TOTAL SPECIFICATION POINTS (20 points maximum)	

TOTAL MAXIMUM POINTS = 430

PRESENTATION WILL BE STOPPED AT TEN MINUTES