BOEING

787-9

BUILD SOMETHING AMAZING

IT at Boeing operates on the leading edge of technology to develop and enhance systems that support Boeing Commercial Airplanes and Defense, Space & Security. Join us to learn more about how you can play a role in shaping the future of aerospace.

University IT Case Competition

WHO enthusiastic students enrolled during **Fall 2014 and/or Spring 2015** with an interest in technology

WHAT a chance for talented individuals to showcase their technical capabilities and have a chance to win some great prizes

WHEN register by **Jan 12, 2015**
submit by **Feb 2, 2015**

WHY top 3 teams will win **prize money up to $3000 and a trip to Seattle** to visit the Museum of Flight & the Boeing Everett Factory

Email ituniversitycasecompetition@boeing.com for more information

boeing.com/careers

UNIVERSITY ENGAGEMENT CASE COMPETITION
LANDSCAPE SCANNER TECHNOLOGY

Case Competition Overview

The Boeing Company is looking for enthusiastic students to compete in a technology focused case competition, where students can demonstrate their technical capabilities, and have the chance to win some great prizes, including a trip to Boeing in Seattle. Students from around the United States across multiple universities will be eligible to participate in the competition and represent their respective university in this company-sponsored event.

The goals and objectives of this case competition is to provide a platform to showcase student talent, evaluate potential employee abilities, and promote the IT recruitment strategy as a university outreach and retention program by helping to retain students in technology and critical skill career paths.

Eligibility

- The competition is open to undergraduate and graduate university students enrolled during Fall 2014 and/or Spring 2015 academic semester, and are in good academic standing with their enrolled university. If you are a Co-Op student, or will graduate from your university at the end of the Fall 2014 semester, you will still be considered eligible to compete in the competition.
- The Competition Committee reserves the right to refuse participation or to remove any participant from the competition and to change eligibility rules and requirements at any time, at its sole discretion.

Project Requirements

The competition will consist of developing an application that can identify 3D objects scattered across a Light Detection and Ranging (LIDAR) scan of a topological area. LIDAR data is a laser scan of a particular landscape represented as point cloud data in 3D space.

- Students will be given five 3D models of various objects.
- These models will be scattered across a randomly selected LIDAR generated landscape.
- The application must be able to decipher the difference between the 3D models and the landscape point cloud and be able to identify the locations of the 5 objects.
- Students will be given examples of LIDAR data to test their product against, but will not have access to the LIDAR landscape model used to evaluate the student submissions.

Team Composition

- Teams shall consist of one to three members.
- An individual student may only be a member of one team participating in the competition.
- Non-students may advise and mentor students competing in the competition, but actual team members must be defined as listed in the Eligibility section. All programming and software development must be completed by members of the team. Outside contractors are not permitted performing work for the competition, and evidence of this will be grounds for immediate disqualification from the competition.
- Teams may consist of graduate, undergraduate and part-time students.

Prizes

- The top 3 teams and their respective advisors will be invited to attend an award ceremony in the Seattle, Washington area. The trip will include airfare, a rental car per team, hotel accommodations, food accommodations, tickets for the Museum of Flight, and a tour of the Boeing Renton or Everett Factory.
- First Place winning team will receive $3,000 prize money and a 1st Place Trophy for their University.
- Second Place team will receive $1,000 prize money and a 2nd Place Trophy for their University.
- Third Place team will receive $500 prize money and a 3rd Place Trophy for their University.

Competition Timeline

September 1st, 2014 – January 12th, 2015: Competition Promotion.

January 12th, 2015: Competition Registration Due

February 2nd, 2015: Project Submission Deadline to the Competition Committee

February 2nd – February 27th, 2015: Project Submission Analysis by the Competition Committee.

February 27th, 2015: Winners will be announced

April 2nd, 2015: Winners Travel to Boeing, Museum of Flight

April 3rd, 2015: Award Ceremony, Everett Factory Tour

Competition Registration

- Students are required to submit a registration form to the Competition Committee by January 12th, 2015. No other expression of intent to compete will be accepted. Students must have the registration form completed and received in order to be qualified to compete.
- The registration must contain the following information:
  - Team members, contact information, class level, and academic major.
  - Identified team leader, who will be the primary contact person for your team.
  - Names and contact information for any academic advisors or mentors working with the students on the case competition.
- Students will receive confirmation of registration within 7 days of submitting their registration form.

Submission Guidelines

- The confirmation of registration will include contact information and a process guide on how to submit student projects to the Competition Committee.
- All materials submitted must meet the requirements and regulations of the competition.
- All submitted software applications must contain instructions on how to install and use the application. The instructions should include:
  - How to install the application
  - How to use the application step-by-step
  - How to read the results of the output
- The output file should contain placement of the models in 3D space. It is left up to the student(s) to decide the best way to present this data to the reviewer.
- Applications must be standalone and must be able to be executed by a third party on a different machine than what was used to develop the application.

- Application submissions are final. Students will not be allowed to submit multiple revisions of their applications prior to the competition deadline.
- Any application issues may be minimally investigated by the competition committee and student team. It is up to the discretion of the committee whether to accept or disqualify a project due to application execution issues.

Judging Criteria

- Judges will be selected by the competition committee. The competition committee will consist of Boeing IT professionals.
- The winning projects will be analyzed based off of a grading rubric. Applications will be reviewed independently by 2 different Boeing professionals, and the grades will be averaged. A sample grading rubric will be provided when a team registers for the event.
- All projects will be judged using the following local client configuration:
  - Windows 7 or 8, 64 bit
  - PC laptop or desktop, up to 32 GB RAM