Iron Dev 2020 Call for Nominations

I/ITSEC is now accepting nominations for its second annual Iron Dev competition at I/ITSEC 2020 November 29 – December 3, 2020. Nominations have been EXTENDED to September 8, 2020.

If you are an organization with developers in the training and simulation industry we are looking for your involvement in this competition to both showcase your team’s skills as well as improve your training system development skills.

Iron Dev is a team competition similar to competitive cooking shows, where teams will be given a challenge and “secret ingredient” to develop a training solution to improve warfighter readiness. Teams will consist of diverse members with skills in AR/VR development, simulation networking/distribution, graphic design, simulation development, and training development. Teams will have from September 15, 2020 to November 20, 2020 to develop their system. On November 20, 2020 the teams will demonstrate their solution in front of a fun and engaging panel of judges in a virtual/online show. Judges will provide the teams with additional challenges to improve their solutions. How well these improvements are made on the time constraints will be evaluated. This creates the stress of the “Iron Dev.” The teams will be given a ‘secret ingredient’ on November, 20, 2020, for integration into their solution for the final show. Then the teams will be invited to present their solutions virtually at I/ITSEC on December 3, 2020 to the judges to determine the Most Innovative Solution, Most Effective Solution, People’s Choice - one team can win all three categories!

The four teams will be selected to compete at the conference and up to 5 members per team will be provided with admission to the conference at no cost. Transportation, food and hotel is at the teams’ expense. However, physical attendance at the I/ITSEC Show is not required; teams can choose to compete remotely/virtually but at least one member at the show is required.
The STE CFT will have observers in the audience and they helped shape the stretch goals. There is a chance that your solution may catch their attention and they may conduct separate negotiations with your team for potential inclusion in the Technical Integration Facility (TIF) and/or Tech Grove for demonstration. The STE CFT is very interested in something they have not seen before. Be bold, be novel.

**Team Nominations**

From the submitted nominations, we will down select to the final **four** competing teams based on information provided. Teams can be formed from academia, government, industry or any combination. Nominate your team.

There are no restrictions on team size or composition.

**Recommended Team composition**

We envision teams capable of developing distributed AR/VR and game-based training/education systems will be well suited for this competition. Recommended team competencies should include distributed simulation expertise, software programmers, digital artists, production, and training developers. We are tailoring our challenge around this skill mix.

**The Nomination Process**

Teams will submit their nomination package via online portal. The **4** teams will be selected and notified based on the following: 1) Potential of the team to develop a distributed AR/VR training/education system, 2) team composition based on skills, 3) How passionate the team is about being in this competition, 4) the merits and novelty of their proposed solution to the initial challenge described below.

**The Challenge**

Consistent with the real world environmental challenge that COVID-19 is presenting us today, we are seeking solutions which enable training systems delivered to the point of need leveraging virtual and/or highly dispersible and deployable technologies. Teams will solve a training/education/operational problem by developing a prototype distributed AR/VR training, education, or operational solution. The solution may be an AR/VR game/simulation/simulator, AR/VR data visualization tool or a combination of these distributed online. We will provide additional improvements to be made based on the Nov 20 demo and will also provide a secret ingredient on **November 30, 2020** which much be incorporated into the solution for the final show competition on **December 3, 2020**. This secret ingredient is more inspirational than a physical ingredient and teams will be evaluated on how well their solution incorporates in the spirit of the secret ingredient and provides training/education value. The ‘secret ingredient’ to the competition will be relatively minor and focused on digital artwork. Here are a few motivational strive goals teams could develop a solution to address:

- Allow distributed commanders and staff to better visualize (AR/VR/MR) the terrain and their units to coordinate operations.
- Allow distributed leaders to visualize (AR/VR/MR) data from the COVID-19 pandemic in meaningful ways to aid in understanding and decision making.
- Allow distributed members of a team to visualize (AR/VR/MR) video feeds from drones and collaborate on search and rescue operations.
- Allow distributed small unit of Soldiers/Marines/Sailors/Airmen to visualize (AR/VR/MR) important situational awareness information to improve operations in a synthetic or live environment.
- Allow distributed members of a team to visualize (AR/VR/MR) and operate multiple unmanned systems (air, ground, and/or sea)
- Allow distributed members of a team to train collectively using immersive (AR/VR/MR) tools.
Something we didn’t think of which you believe will move the needle in enabling AR/VR/MR training systems where and when needed.

The above are strive goals. More is better. The more you strive and attempt to achieve the above the better your score will be. The more novel (not seen before) and innovative your solution is, the better. Striving to achieve more will be rewarded. Be bold!

**The Competition Timeline**

**September 15, 2020.** Kickoff event online. Teams will receive the final challenge and secret ingredient.

**September 16, 2020.** The teams will interact with designated subject matter experts (SME) to brief their initial concept, and receive feedback from the SME’s.

**September 16, 2020.** Teams develop their solutions. They may continue to interact with the SME’s, and competition POC’s for rule clarification. Testing with remote users is strongly encouraged.

**November 20, 2020.** Teams will present and demonstration their solutions to the judges in an online presentation. Judges will score the solutions and provide feedback to the teams about their solutions. The teams will be given a ‘secret ingredient’ to the competition. Teams will have until Thursday to refine their solution and presentation.

**November 30, 2020.** Teams submit their solution videos.

**Monday, December 1, 2020.** Teams showcase their solutions to the team of judges, and engage in a brief question and answer with the judges. This is filmed and will be shown as a part of the show on Thursday, Dec 3, 2020.

**Thursday, Dec 3, 2020.** This is the final show and where the teams and their solution will be viewed by many at the conference and online in a 90 minute produced show. Also shown are interviews about why a team member is a developer and what they like about their chosen career path. The videos from the December 1 showcase will be edited and shown to the audience. After all demos are complete, the judges will announce the winner and prizes will be provided.

**Judging**

We will have a panel of industry and government experts. They will evaluate the following: Technical Execution, Addressing the Challenge, Addressing the Secret Ingredient, Boldness/Innovation. Most important factor being judged is the original thought and execution by the team. Also remember this competition is intended to be professionally developing and rewarding.

**Tools and Software**

Teams will provide their own computers, equipment, distribution hardware/software and AR/VR hardware/software.

**Contacts**

Brian Vogt, SAIC, brian.vogt@saic.com