Unisys Cloud 20/20 Version 7.0

What is Cloud 20/20?

Cloud 20/20 is one of India's biggest online technical project contests. Unisys, in its endeavor to nurture innovation and promote thought leadership in the next generation, will provide a platform to thousands of students from across the country, to present innovative ideas around disruptive technologies.

Today, technologies like mobility, big data, or cloud computing have not only disrupted the status quo, but reshaped the way we live and work. These technologies, which have the potential to solve many of the world's most complex, pressing issues, are the focus of Cloud 20/20 Version 7.0.

Launched in 2009, Cloud 20/20 is open to research students, post-graduates as well as pre-final and final year engineering students in Computer Science, Information Technology, and other related fields. This contest will give students the opportunity to refine their technical knowledge and marketable skills by working with some of the best minds in the IT industry.

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Throughout its 142-year history, Unisys has strived to find solutions to many of the world's most pressing IT and business challenges by leveraging disruptive technologies. In keeping with this goal, this year's contest will focus on solving the real-world challenges of implementing disruptive technologies.

Winning teams stand a chance to win **prizes worth up to INR 2.50 lakhs**. Additionally, they also get an opportunity to intern and explore career opportunities with Unisys.

Students can submit projects under the following broad technical areas:

- 1. Cloud Based Applications and Services: The convergence of cloud and mobile computing will continue to promote the growth of centrally coordinated applications that can be delivered to any device. Cloud is the new style of elastically scalable, self-service computing, and both internal and external applications will be built on this new style. In the near term, the focus for cloud/client will be on synchronizing content and applications across multiple devices and addressing application portability across devices. Over time, applications will evolve to support simultaneous use of multiple devices. In the future, games and enterprise applications alike will use multiple screens and exploit wearables and other devices to deliver an enhanced experience. Example: As the need for cloud based apps and services continues to grow, there will be a need for a development model for these applications and services, which will support the cloud based software development lifecycle.
- 2. Cloud Security: One of the top concerns expressed by IT managers in recent surveys regarding their reluctance to move business critical applications into a cloud environment was security. Most of the security concerns stemmed from external attacks such as malware, denial of service, and hacking. We are looking at submissions that attempt to solve these issues. Are there new threats on the horizon that might specifically target a cloud provider? How would you prevent them? You can also consider various scenarios like secure data for multitenancy, computation of encrypted data, etc.
- 3. Computing Everywhere: With mobile phones becoming more powerful, there is increased emphasis on serving the needs as well as harnessing the power of the mobile user in diverse environments, as opposed to focusing on devices alone. For example, backend processing for data personalization and patternization, and use of these patterns to create more effective and efficient context sensitive information sharing for the end user's benefit.
- 4. **Internet of Things:** The combination of data streams and services created by digitizing everything creates four basic usage models Manage, Monetize, Operate, and Extend.

These four basic models can be applied to any of the four "Internets." Enterprises should not limit themselves to thinking that only the Internet of Things (assets and machines) has the potential to leverage these four models. For example, the pay-per-use model can be applied to assets (such as industrial equipment), services (such as pay-as-you-drive insurance), people (such as movers), places (such as parking spots), and systems (such as cloud services). Enterprises from all industries can leverage these four models.

- 5. **Data Analytics:** Internet of Things and Big Data combining to have advanced, pervasive, and invisible data analytics will be needed to handle, manage, and contribute to Big Data. Its various analytics with real-time precision is more futuristic in the way businesses evolve and satisfy customer needs. Example: Connectivity of utility components and data analysis at source and heavier data-processing in the cloud.
- 6. **Context-Rich Systems:** Ubiquitous embedded intelligence combined with pervasive analytics will drive the development of systems that are alert to their surroundings and able to respond appropriately. Context-aware security is an early application of this new capability, but others will emerge. By understanding the context of a user request, applications can not only adjust their security response, but also adjust how information is delivered to the user, greatly simplifying an increasingly complex, computing world.
- 7. Potential Future Technologies: Computer Scientists around the world are doing extensive research in different areas. Few of these technologies may emerge and change computing in the near future such as Intelligent Automation, Personas and Context, Social Computing, and Contextual Computing and Augmented Reality. We are looking at submissions that come up with innovative ideas in these areas, addressing various aspects of implementation and usage.
- 8. Targeted Innovation Projects: Under this category, the Unisys Technical Team will propose project ideas and interested students with a flair for development can pick up these project ideas and work on development and implementation under the guidance of Unisys engineers and their faculty members. During the first phase of the event, October 16, 2015 to December 24, 2015 students will provide their project ideas in a pre-specified format. All project proposals will be reviewed for merit/innovation and selected student teams will work on developing and implementing the project under the guidance of Unisys engineers and their faculty members.

Important Timelines For SIP/TIP Categories

- Phase I: Registration & Abstract shortlisting (Project Identification Stage): From 16th Oct 24th Dec 2015
- Phase II: Weekly project reviews (Project Implementation Stage): From 02nd Nov 26th Feb 2016
- Phase III: Preliminary & Final Remote Presentation (Project Demonstration) 26th Feb 2016 25th March 2016
- Grand Finale 31st Mar 1st April 2016 OR 7th 8th April 2016