UNISYS

What is Unisys Cloud 20/20™?

Unisys Cloud 20/20 is one of India's biggest online technical project contests. Launched in October 2009, the contest gives students from institutions around the country an opportunity to offer innovative ideas on areas of cloud computing.

Entering its sixth year, the contest is open to research students and post-graduates as well as pre-final and final year engineering students in Computer Science, Information Technology, and other related fields. Each year, contest winners are given the opportunity to participate in various internship projects at Unisys India as well as explore future career options with the organization.

Unisys Cloud 20/20 has drawn large and increasing participation from universities across India. This growing participation coupled with the high caliber of entries for each contest is a testimony to the tremendous talent pool of skilful and technically proficient young people in India.

Unisys Cloud 20/20 Version 6.0

Unisys is committed to tackling key issues in the technology industry and welcomes a dialog with those intrigued by its possibilities and complexities. This year's contest focuses on the real-world challenges of implementing successful cloud computing solutions. Unisys Cloud 20/20 Version 6.0 will have two broad sections:

Section A: Student Innovation Projects

Under this category, students will work on the following broad technical areas:

1. Applications for the Cloud

For the cloud to truly become the new IT paradigm, it will not be enough to simply move just the non-mission critical applications into the cloud environment. Generic as well as industry related apps can now be distributed and consumed via off-premise hosting and can then be managed as-a-Service. Inevitably, some new applications will need to be developed, or existing applications will need to be re-developed to fit the cloud, rather than the traditional data center. We would like to see submissions that address challenges and focus on methods that clouds can incorporate to adapt and host mission critical workloads. How can Clouds provide the reliability, security, performance and SLAs needed for mission critical applications? Is the cloud really ready for mission critical applications? If not, what can make it ready for mission critical applications?

2. Security Issues in the Cloud

One of top concerns expressed by IT managers in recent surveys regarding their reluctance to move business critical applications into a cloud environment was security. Much of the security concerns stemmed from grey areas in security issues and solutions involved that can protect corporate data and reject attacks from outside, such as malware, denial of service attacks and hacking. We are looking at

submissions that try to create clarity within these areas and suggest solutions too. Are these issues different for cloud providers from those experienced by traditional outsourcing scenarios? 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. Big Data in Cloud

The emergence of Cloud Computing has had a big impact on Business Analytics. The traditional approach to Business Analytics has been challenged. Business Analytics on the cloud is one of the new exciting areas receiving lot of attention. We are looking at papers that address data migration and synthesis and consolidation on the cloud for business analytics. How can I segregate business value data in big data? How do I move data into cloud? How do I modify the organization and structure of big data for faster queries?

4. Potential Future Technologies, Open Source Technologies & Disruptive Technologies

Computer Scientists around the world are doing extensive research in different areas and few of these technologies may emerge and change the way of computing in the near future. A large and enthusiastic open source community too is making great contributions to the state of art! Furthermore, few emerging technologies may be disruptive and change the way we do business! Multicore and hybrid processors, fabric computing, Web mashups, ubiquitous computing, Contextual computing and Augmented reality are making waves on the technology globe. We are looking at submissions that come up with innovative ideas in these areas, addressing various aspects of implementation and usage.

5. Cloud based testing

Cloud computing is opening up new avenues for testing. As complexity of applications grow and license costs increase exponentially, it becomes prudent for organizations to use shared resources – such as cloud environment – to manage their testing requirements.

We are interested in papers that highlight methods for utilizing cloud for testing by leveraging the cloud attributes to provide the benefits of cost and ease of use. Also, consider related concerns: How does data security and integrity play here? What about the interoperability issues?

6. Projects on System Programming

Students may submit projects related to OS internals (Windows/ Linux/etc), BIOS software, Device Drivers, Middleware, Storage, Networking and Software Engineering Tools.

Section B: Targeted Innovation Projects

Under this category, Unisys Technical Team will propose project ideas and interested students with 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 event, (July 4' 2014 -- October 2, 2014) 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

- Phase I: Project identification stage (July 4' 2014 -- October 2, 2014)
- Phase II: Project implementation (July 18, 2014-31 – December 2014)
- Phase III: Project Demonstration (January 1, 2015 – January 15, 2015)
- Final Demonstration and Grand Finale: February 26-27, 2015

Collaborating with the Academic Community

Unisys has always been deeply committed to furthering innovation and identifying, rewarding, and nurturing young talent. Our history of collaborating with the academic community goes back to 1946, when the founders of the modern company developed the Electronic Numerical Integrator And Computer (ENIAC), the world's first large-scale, general-purpose digital computer in collaboration with the University of Pennsylvania.

Unisys India is proud to continue this tradition of collaboration with Unisys Technology Forum India (UTFI).Through this initiative, we bring the technology industry closer to students, empowering research-oriented minds across the country to play a more active role in shaping tomorrow's technologies. A well-equipped digital library, technical webinars, laboratories to turn promising concepts into reality – UTFI offers all this and more to students who are keen to apply their knowledge to futuristic technologies.

Exciting prizes in store for all winning teams! Stay tuned for further information!