

WorldSkills Innovation Lab participant

ITE 3D/Virtual Reality VET – Floristry

Location: ITE College of Innovation, Singapore

Duration: 3 months, starting approx. Feb 2013

Background:

WorldSkills Foundation and ITE are excited to announce the first WorldSkills Innovation Lab, commencing alongside the opening of ITE's new, state-of-the-art Creativity & Innovation campus in downtown Singapore. This project is based around the design and development of immersive 3D and Virtual Reality training content for a new series of Floristry courses that ITE will offer later in 2013.

The selected candidates will join with students and staff – as part of ITE's Academic Pedagogy Innovation team – to develop cutting-edge, immersive Floristry training experiences, prototyping in 4-wall, 3D space. The project will target a range of new commercial and educational partnerships, and will also be showcased at WorldSkills 2013 in Leipzig, Germany.

This is the first of a range of Innovation Lab projects that WorldSkills Foundation hope to develop in 2013. If you are a creative, inventive developer with a hunger for creating beautiful, groundbreaking interactive media and interface design – and excited to explore what Singapore has to offer over a 3-month mission to this dynamic technology hub – we want to hear from you!

Provisions:

WorldSkills Foundation will fund return flights and weekly stipend (TBC). ITE provide all accommodation on campus, and all associated costs.

We just need you, your ideas, and your technical skills!

Language:

Course to be delivered in English: professional language proficiency is crucial.

Requirements:

- WorldSkills Champion: You have represented your country in skill competition at WorldSkills level.
- Skill set: Software Development, 3D Modelling and Authoring. Please see ITE project doc, page 3-4.
- Good verbal and written communication skills.
- Outgoing, independent and friendly, enjoy meeting new people and working in teams.
- Interest in travel and exploring new cultures.
- Social media savvy... we need you to share your experience with your family and friends around the world; help us push your story out to our global network of supporters!
- General interest in technology industry and VET sectors.
- Keen to experiment, prototype and explore the design process.

Application Process:

Applications close: 11 Jan 2013 (midnight GMT)
Successful candidates announced: End of January 2013
Expected placement start: Early–mid Feb 2013
Expected placement finish: April/May 2013
Evaluation and showcase preparation: May-June 2013
Showcase at WorldSkills 2013: July 2013

To apply/for more information:

Please send your CV/résumé and a cover letter explaining your interest in the role.
Links to online samples of your work (eg. related projects) are also highly encouraged.

innovation.labs@worldskillsfoundation.org

Academic & Pedagogic Innovation/ITE:

3D Virtual Reality Learning Applications Development

We are looking for *passionate and creative talents* to be part of ITE College Central's Academic & Pedagogic Innovation (API) team to deliver appealing, interactive and engaging learning applications on 3D Virtual Reality (VR) platform.

Skillsets:

- Pedagogical design skill to design and develop a instructionally sound learning application using the affordances of 3D virtual world to add value to students' learning
- 3D modeling using 3D authoring tools such as but not limited to Cinema 4D, 3DS Max, CAD or Maya
- Ability to use scripting with database accessibility for interactions and simulations control
- Involved in debugging and troubleshooting, integrating objects into the 3D platform engine, optimization and testing
- Project management skill

Project Description – Floristry 3D VR learning application

This is a new innovative 3D VR learning application project for the ITE Floristry course. The project members will have the opportunity to work with the Floristry subject matter experts to conceptualize the instructional pedagogy learning design and develop the learning application. The Floristry learning application will expose the students to different florae with a number of interactive 3D models of different anatomy of flora and foliage that students can view the exploded parts of the plants. Furthermore, there can be interactive learning scenarios of a virtual Flora Decor for events such as weddings, birthdays and product launches, where the students can decorate the venue according to the themes in a VR environment.

Competency	Task
A. To design instructionally sound learning application using technologies/tools.	<p>A1. Collate the needs of user groups through incoming requests, one-to-one discussions, surveys, etc.</p> <p>A2. Conduct research that is focused on enhancing the use of innovative and effective technologies/tools for learning application.</p> <p>A3. Create learning design specification documents and storyboard based on the applied technologies/tools.</p> <p>A4. Evaluate the technologies/tools to assess if the learning design fits instructional purpose.</p>
B. To produce 3D models/art assets for learning application.	<p>B1. Prepare art asset requirements.</p> <p>B2. Produce sketches design of elements and environment of art asset.</p> <p>B3. Create 3D models/art assets. B4. Integrate 3D models/assets onto the respective application platform.</p> <p>B4. Perform checks on final 3D models/art assets on the respective application platform.</p>

<p>C. To perform program scripting.</p>	<p>C1. Develop programs for application functionalities and interactions.</p> <p>C2. Perform code optimization.</p> <p>C3. Perform unit testing.</p> <p>C4. Prepare technical documentations.</p>
<p>D. To perform application testing.</p>	<p>D1. Create test plan.</p> <p>D2. Create bug report.</p> <p>D3. Conduct user acceptance test.</p>
<p>E. To manage project effectively.</p>	<p>E1. Prepare project schedules.</p> <p>E2. Determine resource requirements.</p> <p>E3. Identify deliverables.</p> <p>E4. Monitor project progress.</p> <p>E5. Prepare project report.</p> <p>E6. Present project.</p>