Job Title	Research Assistant
No. of Positions	02
Duration	06 Months
School/Institute/Centre	SINES

1	**Purpose of Position**
	The research assistant should be able to pursue research, development, and documentation of a funded project on VR-based learning in complex domains. The position requires the RA to assist the PI in consolidating 3D models/simulations, design of experiment, and analysis of data gathered in the user study.

2	**Functions/Duties (Key Responsibilities)**
	The tasks include: • Development of realistic 3D models optimized for VR • Work on gameplay systems/tools to build simulations • Collaborate with team members to design solutions and plan the experiments • Coordinate the conduct of user study on human participants • Analyze data gathered from the experiments • Document results in the form of reports and research publications

3	**Requirements**	
	Essential	**Desired**
Qualifications	Bachelor's degree in Computer Engineering or relevant field from HEC recognized institution or equivalent demonstrable experience	Master's degree in EE/CE/CS or relevant field with demonstrable experience
Experience	2 years' experience in game related programming (in Unity or Unreal engine)	
Knowledge/ Skills/Abilities/ Competencies	• Thorough understanding of game engines • Sound knowledge of computer graphics • Strong coding experience • Strong problem-solving skills • Ability to write clear, maintainable, portable code that conforms to standards and practices • Experience with conduct of user study involving human participants is a plus	

4	**How to Apply**
	Please email your resume to shahzad.rasool@sines.nust.edu.pk only if you fulfill the criteria mentioned above with job title **"HEC_Research Assistant - VR"** in the subject field by **26th Dec 2024**.

Job Title	MS/MPhil Student
No. of Positions	02
Duration	06 Months
School/Institute/Centre	SINES

1	**Purpose of Position**	
	The student should be able to pursue research and development for a funded project on VR-based learning in complex domains. The position requires the student to create 3D models and simulations that will be used by other team members to conduct a user study.	
2	**Functions/Duties (Key Responsibilities)**	
	- Design and create highly realistic 3D models for build VR/AR experiences - Lighting and Shading VR scenes and assets in game engines - Create and debug shader and materials graphs - Optimize 3D assets for VR - Design and develop full-featured systems from the ground up - Curate materials and other graphic asset libraries, standardize workflows - Assist in setting up mixed reality studio and build MR experiences	
3	**Requirements**	

		Essential	Desired
Qualifications		Bachelors in Computer Science/ Engineering or relevant discipline from HEC recognized institution and enrolled in an MS program	Master's degree in CS/CE or Mathematics with relevant experience
Experience		• XR development experience will be preferred	
Knowledge/ Skills/Abilities/ Competencies		- Understanding of 3D content principles - Experience working with 3D content creation tools such as 3ds Max, Maya, Blender, etc. - Strong foundation of look development, lighting/camera composition - Detail-oriented with strong communication skills - Hands-on experience working with game engines and/or APIs is a plus	

4	**How to Apply**
	Please email your resume to shahzad.rasool@sines.nust.edu.pk only if you fulfill the criteria mentioned above with job title "**HEC_Student – VR**" in the subject field by **26th Dec 2024**.