

The 9th ACM SIGGRAPH Conference and Exhibition on EXHIBITION: 6 - 8 DECEMBER 2016 Computer Graphics and Interactive Techniques in Asia

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THE VENETIAN MACAO, MACAO



Tuesday, 6 December 2016				
10:00 – 11:30 hrs	Fingo, a Natural HCI Solution in VR  Presented by uSens Inc.  Natural interaction and accurate ego-pose estimation are two core problems in VR/AR environment. Our Fingo device and corresponding algorithms can provide a practical solution to both problems. For natural interaction, our machine learning based method can recognize the full 26DoF skeleton model of bare hand. For pose estimation, our Visual IMU fusion SLAM algorithm can estimate 6DoF pose information with very small delay (<10ms) and high accuracy (error<2mm). In this presentation, we will share our experience in the R&D process, and demonstrate our latest achievements.  -Gengyu Ma, VP of Technology, uSens -Wentao Mao, Principle Engineer, uSens -Xueqin Xiang, R&D Director, uSens	Naples Room 2704, Level 1		
14:00 – 15:30 hrs	Image Techniques and Augmented Reality in Tencent  Presented by Tsinghua University – Tencent Joint Lab  (1) Wechat augmented reality open platform and others: we will present some of our recent works and thoughts about an easy-to-use augmented reality open platform, a mobile 3D reconstruction system and indoor navigation on Robot and mobile phone.  (2) Applications of image understanding and augmented reality in Tencent YouTu Lab: This talk will introduce you image understanding and augmented reality of the above technology research progress and interesting product applications.  (3) Image completion and analysis in Street Views: the speaker will present the image completion and analysis research in Tsinghua-Tencent Joint Lab, and give their application in Tencent products.  -Bo Chen, Director, Wechat AI, Tencent -Sun Xing, Senior Engineer, Youtu lab, Tencent -Zhe Zhu, Postdoctoral Researcher, Tsinghua University	Naples Room 2704, Level 1		





Tuesday, 6 December 2016				
16:00 – 17:30 hrs	MEITU: Image Beautification Technologies and More  Presented by Meitu, Inc.  Meitu is a global innovator in mobile photography and image/video editing. Today, our apps are installed on over 1.1 billion unique devices around the world. In this talk, we will present recent and selected advances by Meitu Imaging & Vision Lab (M-LAB). Topics include M-FACE face analyses in images, M-BEAUTY data-driven image beautification, editing, and stylization, AR/VR technics for selfie photos, etc. ALL ARE WELCOME!  -Pengfei Wan, Researcher, Meitu, Inc.	Naples Room 2704, Level 1		
16:15 – 17:45 hrs	DJI's Vision and Machine Learning Technologies  Presented by DJI  DJI is a leader in the consumer drone market. During 2016, DJI has released two milestone products - Phantom 4 and Mavic, which bring state-of-art visual navigation technologies to the users. They make the drones more autonomous and much easier to use. In this talk, we will briefly introduce these technologies and show what amazing photo or video footage can be shot with them.  -Kaiyong Zhao, Project Manager, DJI	Naples Room 2703, Level 1		



Wednesday, 7 Do	ecember 2016	
12:00 – 13:30 hrs	Khronos Graphics, Compute and Vision APIs – including Vulkan Next Generation GPU Acceleration	Naples Room 2704, Level 1
	Presented by Khronos Group	
	Discover how over 100 companies cooperate at the Khronos Group to create open, royalty free standards that enable developers to access the power of hardware to accelerate the most demanding tasks in cutting-edge applications – including heterogeneous parallel computation, 3D graphics and vision processing. This session includes the latest updates to API standards including OpenGL, OpenCL, OpenVX, and the recent Vulkan new generation graphics and compute API. The session will explore how modern APIs will accelerate the availability of compelling experiences such as neural-net based driver assistance, virtual and augmented reality, and advanced environmental tracking and 3D reconstruction.	
	-Neil Trevett, Khronos Group President, NVIDIA Vice President Developer Ecosystem By day, Neil works at NVIDIA where he helps to drive the developer API ecosystem that enables applications to take advantage of advanced GPU and silicon acceleration. By night, Neil is the elected President of the Khronos Group that defines open standard APIs for graphics, compute and vision acceleration. At Khronos, Neil initiated the OpenGL ES standard now used by billions worldwide every day, helped catalyze the WebGL project to bring interactive 3D graphics to the Web, chairs the OpenCL working group defining the open standard for heterogeneous parallel computation and has helped establish and launch the new generation Vulkan GPU API.	
14:00 – 15:30 hrs	All You Need to Know About SAMSUNG VR	Naples Room 2704, Level 1
	Presented by Samsung R&D Institute China – Beijing	
	-Weiming Li, Senior Engineer, Samsung R&D China – Beijing	





Wednesday, 7 December 2016				
16:00 – 17:30 hrs	Virtual Surgery Simulators  Presented by State Key Laboratory of Virtual Reality Technology and Systems, Beihang University, China  (1) We introduce a haptics-equipped interactive prototype system towards PCI surgeons training and patient-specific surgery rehearsing, which can afford trainees the opportunity to approximately experience the entire PCI procedures. (2) We introduce our developed laparoscopic surgery simulator, which can provide full skills training for the laparoscopic surgeons, from basic skills to detailed clinic cases. (3) We introduce iDental, the first independent researching dental operation simulator of China, with multifunctional VR simulation like dental basic teaching, surgery skills training and test. Technology: real-time rendering (1000Hz), elaborate simulation and exact identification of skin, tongue and tooth stiffness based on feedback.  -Shuai Li, Associate Professor -Junjun Pan, Associate Professor -Dangxiao Wang, Professor	Naples Room 2704, Level 1		