

pAug 9 (Fri)	14:00 – 18:30	Registration	Place: Lobby-Empark Grand Hotel Kunming
	18:30 – 21:00	Welcome Dinner *Luggage can be escrow placed in Registration Office.	Place: Jinxiang Hall –2F

Aug 10 (Sat)	09:00 – 09:30	Opening Ceremony & Group photo	Place: International Hall
	09:30 – 10:30	Invited Lecture IL1	Place: International Hall
	10:30 – 10:50	Coffee Break	
	10:50 – 12:30	Invited Lecture IL2	Place: International Hall
	12:30 – 13:30	Lunch Break	Place: Buffet-1F or Chinese Restaurant-2F
	13:30 – 16:30	Full Paper Session FS1	Place: Empark Grand Hotel Kunming-3F
		FS1-A Applied Geometry and Graphics Graphics Education	NO.1
		FS1-B Engineering Computer Graphics Graphics Education	NO.2
	16:30 – 16:50	Coffee Break	
	16:50 – 18:35	Poster Session PS	Place: NO.1
18:40 – 20:30	Dinner	Place: Chinese Restaurant-2F	
13:30 – 18:00	Accompanying Persons Tour		

Aug 11 (Sun)	08:30 – 18:00	Excursion	
	18:00 – 21:30	Banquet	Place: Empark Grand Hotel Kunming- VIP Conference Room

Aug 12 (Mon)	08:30 – 10:30	Full Paper Session FS2	Place: Empark Grand Hotel Kunming-3F
		FS2-A Applied Geometry and Graphics Graphics Education	NO.1
		FS2-B Engineering Computer Graphics Theoretical Graphics and Geometry	1/3VIP. Conference Room
	10:30 – 10:50	Coffee Break	
	10:50 – 11:50	Full Paper Session FS3	Place: Empark Grand Hotel Kunming-3F
		FS3-A Graphics Education	NO.1
		FS3-B Graphics Education	1/3VIP. Conference Room
12:00 – 12:30	Closing Ceremony	Place: 1/3VIP. Conference	

Plenary Sessions

	SAT, 10 Aug	09:00 – 09:30	International Hall	Chair: Gang ZHAO
	Open Ceremony & Group photo Welcome Addresses - CGS Welcome Addresses - JSGS Welcome Addresses - ISGG			Prof. Jianguang SUN Prof. Kazuki TAKENOUCI Prof. Yasushi YAMAGUCHI

IL1	SAT, 10 Aug	09:30 - 10:30	International Hall	Chair: Yasushi YAMAGUCHI
Article	1. AI BASED QUALITY CHECKING FOR THE BUILT ENVIRONMENT			Inhan KIM
	2. SEVERAL FEATURES OF PICTORIAL REPRESENTATION OF COW CARRIAGE WHEELS IN ANCIENT JAPANESE PICTURE SCROLLS			Kazuki TAKENOUCI

IL2	SAT, 10 Aug	10:50 – 12:30	International Hall	Chair: Hiroataka SUZUKI, Hua LI
Article	1. FROM VIRTUAL PROTOTYPING TO SMART CONSTRUCTION, TO CONSTRUCTION ERGONOMICS			Heng LI
	2. ARTIFICIAL INTELLIGENCE AND BIG DATA BASED NEW ERA OF BIOMEDICAL IMAGING			Jie TIAN
	3. DEVELOPMENT OF INTERACTIVE VISUALIZATION SYSTEM FOR TRAJECTORY ANALYSIS OF AIR TRAFFIC			Kensuke YASUFUKU

Full Paper Session

FS1-A	SAT, 10 Aug	13:30 – 16:30	NO.1	Chair: Kazuki TAKENOUCI; Takashi KANAI; Jing GAN
No./Page	Article			Authors
06/p.28	SURFACE GEOMETRY CONTROL OF STAINLESS STEELS BY FEMTOSECOND LASER NANO-/MICRO-TEXTURING TOWARD SUPER-HYDROPHOBICITY AND SUPER-HYDROPHILICITY			Tatsuhiko AIZAWA, Tomoki HASEGAWA and Tadahiko INOHARA
14/p.30	AN IMAGE-BASED SCENE COGNITION METHOD TOWARDS MOBILE INSPECTION APPLICATION			Hongming CAI, Yan SUN, Zheng WANG, Haiyan YU and Yuanjun HE
15/p.33	SOFTWARE DEVELOPMENT FOR MODELING IRREGULAR FINE PROTRUSIONS FORMED BY SPUTTER-ETCHING			Sande GAO, Kejiro NAKASA and Loulin HUANG
16/p.36	A MORPHOLOGICAL EXAMINATION OF STREET NETWORKS AND PRESERVATION OF TRADITIONAL DWELLINGS IN THE OLD MINGCHENG DISTRICT OF XI'AN			Kun YUAN, Hirokazu ABE, and Kensuke YASUFUKU
25/p.41	BRITTLE FRACTURE PREDICTION METHOD FOR PLANE SHAPES USING CONDITIONAL-GANS			Yuhang HUANG, Takashi KANAI
32/p.44	INTRODUCTION OF NATURE FORMS THROUGH URBAN DESIGN: BIOMIMETIC METHOD IN THE PROCESS OF DESIGNING CANDELABRA MODEL			Biljana S. JOVIĆ, Andela D. MITIĆ
44/p.53	THE PAST, PRESENT AND FUTURE OF ASIAN FORUM ON GRAPHIC SCIENCE			Xiao LUO, Baoling HAN, Kenjiro SUZUKI, Bingshu TONG, Yasushi YAMAGUCHI,

		Jianguang SUN, Hirotaka SUZUKI, and Emiko TSUTSUMI
58/p.57	STUDY ON FORMS OF CITY CENTERS IN JAPAN	Naomi ANDO
26/p.87	REPRODUCTIONS EDUCATION IN MEDIA	Hidekazu TSUJIAI
27/p.89	DATA-DRIVEN ENGINEERING GRAPHICS TEACHING BASED ON RAIN CLASSROOM	Peng MOU

FS1-B	SAT, 10 Aug	13:30 – 16:30	NO.2	Chair: Kensuke YASUFUKU; Lijie GUAN; Kazuhiro YAMASHIMA
No./Page	Article	Authors		
08/p.60	VISUALIZATION OF OIL FILM PRESSURE INDICATION DURING LUBRICATION PHENOMENON ANALYSIS USING THREE-DIMENSIONAL CAD	Toshiaki KANDA, Masatoshi NIIZEKI		
11/p.62	DEVELOPMENT OF TRAINING METHOD AND MATERIALS FOR YOUNG DESIGNERS IN THREE-DIMENSIONAL MECHANICAL DESIGN	Shigeo HIRANO, Susumu KISE, Sozo SEKIGUCHI, Kazuya OKUSAKA and Tsutomu ARAKI		
12/p.64	AN EXPERIMENT TO EVALUATE DAYLIGHT PERCEPTION IN GAMIFIED VIRTUAL ENVIRONMENTS	Muhammad HEGAZY, Kensuke YASUFUKU and Hirokazu ABE		
17/p.67	A PROJECTED APPROACH TO REPRESENT 3D RELATIONS TOWARD ROBUSTNESS FOR TRIANGLE-TRIANGLE INTERACTION	Haiyan YU, Hongming CAI, Yuanjun HE and Wenjun ZHANG		
19/p.69	DEVELOPMENT OF INTERACTIVE VISUALIZATION SYSTEM FOR TRAJECTORY ANALYSIS OF AIR TRAFFIC	Kensuke YASUFUKU		
09/p.82	EVALUATION OF THE LEVEL AND STRUCTURE ASSESSMENT OF STUDENT'S KNOWLEDGE IN ENGINEERING GRAPHICS	Dilarom F.KUCHKAROVA, Dilnoza A.ACHILOVA		
10/p.84	BASIC SURVEY OF APHANTASIA IN STUDENTS IN A MECHANICAL ENGINEERING DRAFTING COURSE	Masatoshi NIIZEKI, Mikiyo Kii NIIZEKI		
28/p.92	THE EFFECT OF THREE DIMENSIONAL CAD SOFTWARE ON ENGINEERING DRAWING ABILITY	Jing LIU, Hui GUO		
35/p.96	LEARNING GRAPHICS PROGRAMMING THROUGH INTERACTIVE MEDIA AND VISUALIZATION PROJECTS	Kejkaew THANASUAN		

FS2-A	MON, 12 Aug	08:30 – 10:30	NO.1	Chair: Shigeo HIRANO; Xiao LUO
No./Page	Article	Authors		
20/p.85	AN AR SYSTEM INTRODUCING TSUKUBA CITY	Kazuhiro YAMASHIMA		
24/p.39	SINGULARITY ANALYSIS ON A CLASS OF CABLE-DRIVEN MECHANISMS WITH SUPPORTING PLANE THEOREM	Lewei TANG, Li WU		
38/p.46	RESEARCH ON TRAFFIC SIGN DETECTION BASED ON IMPROVED YOLO MODEL	Zhongyu WANG, Hui GUO		
39/p.48	THE REFORM AND PRACTICE OF ENGINEERING GRAPHICS COURSES IN APPLIED UNIVERSITY	Haiting LV		
40/p.49	DIAGRAMMING THE ANCIENT CHINESE LANDSCAPE PROTOTYPE	Luyi LIU, Luigi COCCHIARELLA		
45/p.55	TRANSFORMATION-BASED MUSICAL GRAPHS	Giovanni ALBINI, Marco Paolo BERNARDI and Luigi COCCHIARELLA		

FS2-B		MON, 12 Aug	08:30 – 10:30	1/3VIP. Conference Room	Chair: Biljana S. JOVIĆ; Hongming CAI
No./Page	Article	Authors			
21/p.71	PARAMETRIC DESIGN OF SINGLE STORY INDUSTRIAL BUILDING BASED ON BIM	Ziru WANG, Xinyuan HU and Chaohao CHEN			
22/p.73	INCORPORATING BIM INTO PREFABRICATED CONCRETE SANDWICH WALL PANEL	Chengyu XIA, Bin DENG, Hongtuo QI, Pengkun LIU, and Mou CHEN			
23/p.76	HYBRID IMAGE OF THREE CONTENTS	Peeraya SRIPIAN, Yasushi YAMAGUCHI			
29/p.78	RESEARCH ON PIPE SURFACE DEFECT DETECTION TECHNOLOGY BASED ON CONVOLUTIONAL NEURAL NETWORK	Zehui YUAN, Hui GUO and Shaoping ZHOU			
13/p.20	EXTRACTION OF GEOMETRIC FEATURES AND PLATE THICKNESS PROCESSING OF CURVED SURFACE SHELL INTERFACE OF POINT CLOUD MODEL	Pengfei ZHENG, Qing LIU, Dajun LIN, Qi AN			
18/p.22	GEOMETRIC MODELING OF KNOTS WINDING AROUND TORUS	Zijian PAN, Xiangbao MENG			

FS3-A		MON, 12 Aug	10:50 – 11:50	NO.1	Chair: Haiyan YU; Roland Kunkli
No./Page	Article	Authors			
33/p.93	MOBILE APPLICATIONS AS TOOLS TO USE IN ARCHITECTURAL GEOMETRIC EDUCATION AND DESIGN	Shilong TAN, Luigi COCCHIARELLA			
34/p.95	TEACHING REFORM PRACTICE OF ENGINEERING DRAWING COURSE BASED ON MOOC SPOC MIXED TEACHING MODE	Xianying TONG, Wei YANG, Li LI, Baoling HAN and Jingying ZHANG			
46/p.104	PROJECT-BASED INTEGRATED PRACTICE OF ENGINEERING GRAPHICS UNDER DIFFERENT TASK SYSTEM	Yunhui ZHANG, Xiuzhi ZHANG, Jun LI and Siyuan LIU			

FS3-B		MON, 12 Aug	10:50 – 11:50	1/3VIP. Conference Room	Chair: Hidekazu TSUJIAI; Kejkaew Thanasuan
No./Page	Article	Authors			
36/p.98	EMOTIONAL EDUCATION FOR HANDICAPPED CHILDREN THROUGH DIGITAL MODELING	Matteo Giuseppe ROMANATO			
37/p.100	EXPLORATION AND PRACTICE WITH INFORMATION TEACHING METHOD OF MECHANICAL DRAWING BASED ON RAIN CLASSROOM	Binghui WU, Yinghui LIU			
41/p.102	A TEACHING ECOSYSTEM OF ENGINEERING GRAPHICS BASED ON DEEPER LEARNING CYCLE MODEL AND ASYNCHRONOUS SPOC	Ming CHEN, Yuanzhong HU, Bo LI and Zhaorong REN			

Poster Session

PS		SAT, 10 Aug	16:50 – 18:35	NO.1	Chair: Sande GAO; Naomi ANDO; Pengfei ZHENG
No./ Page	Article	Authors			
47/p.107	MEDICAL IMAGE SEGMENTATION METHOD BASED ON IMPROVED FULL CONVOLUTION NETWORK	Kaiping FENG, Hai YE			
48/p.109	A COMPARATIVE STUDY ON THE UTILIZATION OF HISTORICAL HERITAGE OF JAPAN AND CHINA	Tiantian GAO, Naomi ANDO			
49/p.111	A COMPUTER AIDED MANUFACTURING SYSTEM FOR THE WHIRLING PROCESS OF TURBINE BLADES	Riliang LIU, Haiguang ZHU			

50/p.114	A RESEARCH ON SIMULATION OF EVACUATION ROUTE MAPUSING DISASTER RISK FACTORS; AN APPROACH BY ROAD EVALUATION USING SPACE SYNTAX THEORY	Kaname TAKENOUCI, Ikuro CHOH
51/p.116	IMPROVED PROJECTION FOR EMBEDDING QR CODE ONTO SURFACES TO BE 3D PRINTED	György PAPP, Miklós HOFFMANN and Ildikó PAPP
52/p.118	EFFICIENT PARAMETRIZATION METHOD FOR REAL-TIME LENS FLARE RENDERING ALGORITHM	István CSOBA, Roland KUNKLI
53/p.121	THREE-DIMENSIONAL COMPUTER SIMULATION OF WATER-SAVING SHIP LOCKS	Tingna DU
54/p.124	UTILIZATION OF DISSECTION TO PRODUCE TWO PLANE TESSELLATIONS FOR LAMPSHADE DESIGN	HirotaKa SUZUKI
56/p.126	RESEARCH ON AMPOULE BOTTLE DEFECT DETECTION SYSTEM BASED ON MACHINE VISION	Xuyuan JI
57/p.127	STUDY ON ARCHITECTURAL EXHIBITIONS AT MUSEUMS	Miharu HIRAYAMA, Naomi ANDO
59/p.130	IMPROVED ALGORITHM FOR SIMULATING GLARE IN THE HUMAN EYE	Andrea BODONYI, Roland KUNKLI
60/p.133	SIMPLE AND EFFICIENTLY PARALLELISED ALGORITHM TO FIND ISOPTIC SURFACE OF POLYHEDRAL MESHES	Ferenc NAGY
61/p.135	THE RESEARCH OF AUTOMATIC DRIVING DIRECTION CONTROL BASED ON END-TO-END VISUAL IDENTIFICATION	Minghong HU, Hui GUO
62/p.136	PARADIGM EXTRACTION OF TRADITIONAL CHINESE HOUSES AND APPLICATION OF ARCHITECTURAL DESIGN	Yue CHEN, Naomi ANDO
63/p.138	STUDY ON UTILIZATION OF AR AND VR IN LEARNING ARCHITECTURE	Fan LIU, Hiromitsu SHIMIZU, Shota ISHII and Naomi ANDO
64/p.140	A CUSTOMIZABLE APPLICATION FOR IMAGE DEFORMATION BASED ON BARYCENTRIC COORDINATES	Ákos TÓTH, Roland KUNKLI
65/p.142	AN INVERTED APPROACH TO HERMITE DATA INTERPOLATION IN $\mathbb{R}^2$ FOR CIRCLE SKINNING PURPOSES	Kinga KRUPPA
66/p.144	A NEW DESIGN OF MULTI-FUNCTION CRADLE	XinPing WANG, Hui GUO
67/p.146	STUDIES ON PICTORIAL REPRESENTATION OF COW CARRIAGE WHEELS IN ANCIENT JAPANESE PICTURE SCROLLS	Kazuki TAKENOUCI
68/p.148	FOREST CULTURE EXPRESSIONS OF SANI EMBROIDERY PATTERNS OF YI NATIONALITY	Liu Li
69/p.149	A BARYCENTRIC COORDINATES BASED OBJECT LOCATION DETERMINATION METHOD FOR ANIMATION PURPOSES	Roland KUNKLI, Andrea BODONYI