















promote BIM/CIM in construction, driving simulators for ADAS, and autonomous vehicle research.

It is my pleasure to host the Design Festival as an opportunity to learn about and envision the most intelligent solutions for a more promising future.

Yuji Ito, President, FORUM8 Co., Ltd.



# FORUM8 DESIGN FESTIVAL 2016-3DAYS + EVE

2016 11.16 wed - 18 Fri

SHINAGAWA InterCity Hall

M FORUM 8



After much anticipation for the new era of Virtual Reality, year 2016 is expected to be the first chapter in its widespread popularization. FORUM8 maximizes the scope of VR technology by providing IM&VR solutions to promote BIM/CIM in construction, driving simulators for ADAS, and autonomous vehicle research. It is my pleasure to host the Design Festival as an opportunity to learn about and envision the most intelligent solutions for a more promising future.

Yuii Ito, President, FORUM8 Co., Ltd.

## Present

FORUM8 Original mouse pad 2016 Original ECOBag, Original pen FORUM8 Original A5 notebook FORUM8 Original Book card ¥500 Lunch coupon (only for premium users)

DAY 1







## Tue. 15 November 17:30-21:00

**Eve of FORUM8 Design Festival** 

## Fusion of dynamic urban model and VR/PM

**Future city party** createdby VR diorama mapping and urban flight attraction



FFORUM8 users and visitors from abroad are invited to this delightful casino-style party decorated with the most advanced expression technologies.

## **■**Diorama Mapping

Future urban and architectural models are displayed. Projection mapping is projected on 1/200 scale model, and various simulations like urban traffic design, crowd simulation in station rotary, and hazard map are expressed by using AR technology.



## **■**Urban flight attraction in a large screen

"Rescue with a drone!" Evacuees are asking for help in a virtual city projected on a large screen. Get the evacuees off the spot with the small drone in a base.

## DJ ONI

DJ Oni works on a lot of sound design for TV shows and movies. He travels and has performed in London, Tokyo, Myanmar and India. He has also worked on numerous huge events for both embassies and commercial patrons. He DJ'd at Design Festival 2015 Eve. which was held for the first time, and his music made the fantastical projection mapping more gorgeous.



## Wed. 16 November 9:50-20:00

## VR Conference Autonomous Driving Conference

9:50-15:30 The 17th UC-win/Road Conference

"Opening address of The 10th FORUM8 Design Festival"

Presentation about The era of virtual reality UC-win/Road

"Past development results of driving simulator and VR system, and future vision"

Executive Officer and System Sales Manager of FORUM8 Katsumi Matsuda

"Associated functions of Driving Sim and ADAS, and future development" Executive officer and VR Development Manager of FORUM8 Pencreach Yoann

## "METI's involvement in autonomous driving"

Automobile Division, Manufacturing Industries Bureau Director of Electric Vehicle, Advanced Technology and ITS Promotion Office Ministry of Economy, Trade and Industr Mr. Shuji Okuda

## **Guest Greeting**

EVE

President of "parliamentary group for considering Automobile Culture" Member of the House of Representatives Mr. Keiji Furuya

## "Trends of autonomous driving- world movement

about standards of automobile"

Director of International affairs, Engineering Policy Division, Road Transport Bureau Ministry of Land, Infrastructure, Transport and Tourism Mr. Hidenobu Kubota

## "Review of autonomous driving and considerations for the future"

Assistant director of Traffic planning, Traffic Bureau, National Police Agency Mr. Takashi Ono

## **3DVR Simulation Contest on Cloud**

15:45-17:20 Award Ceremony for The 15th **3DVR Simulation Contest on Cloud** 

Mr. Ryuta Ieiri as a presenter

Mr. Tatsuoki Inagaki

## 17:20-18:00 Book Launching Lecture

"Learning Road & Pavement Construction Engineering Through VR" President of Pave & Road How-To Way Technology Association (Paroway Tec)

## "BIM & CIM world expanded by FORUM8"

Construction IT World Mr. Ryuta Ieiri "Safe and secure pictograms",

## "Refuge Guidance Sign Total System (RGSS) Guidebook"

Director of NPO Sign Center Mr. Yukio Ota

18:00-20:00 Networking Party, Book Launch Sale

## Thu. 17 November 9:50-19:30

## **VR Conference**

9:50-11:00 The 17th UC-win/Road Conference "Opening address of The 10th FORUM8 Design Festival"

"Break the mold - cognitive ability of human and its limit as the design foundation

> Professor, New Industry Creation Hatchery Center, Tohoku University Mr. Yoshiyuki Kawazoe

## Cloud Programming World Cup Virtual Design World Cup

11:00-12:00 Final Judgement of The 4th Cloud Programming World Cup and The 6th Virtual Design World Cup

Host/Presenter: Ryuta Ieiri

9:50-17:00

## 13:15-15:15 The 9th International VR Symposium

The 2nd State of the Art Technologies in Expression / Latest Contents Sessions / CRAVA Inc.

## "Efforts to utilize leading-edge expression technologies"

President of The Association of State of the Art Technologies in Visual Expression Mr. Satoshi Machida

## "The Possibility of VR in game industry" President of CRAVA Inc. Mr. Kurato Kazuki



DAY2

## 15:30-17:30 Award ceremony of The 4th CPWC The 6th VDWC

## The 2nd Junior Software Seminar Award Ceremony

Host: Mr. Yuji Abe Presenter: Mr. Ryuta Ieiri

## "ArcBazar x ProjectVR"

Mr. Imdat As Mr. Hiroo Kasagi

17:30-19:30 Networking Party

# DAY3

## **Design Conference**

Fri. 18 November

9:50-15:15 The 10th Design Conference

Seismic, Geotechnical and Water Works Sessions

"Opening address of The 10th FORUM8 Design Festival"

## "Public works that contribute to the productivity improvement in the depopulating society"

a member of the House of Representatives Mr. Keiichiro Asao

## "The latest cases and simulations of evacuation analysis and security measures"

Fire Safety Engineering Group (FSEG) University of Greenwich

Prof. Edwin Galea

# "Transition of bridge technology - toward tough and long-lasting bridge"

## Professor of Graduate School of Science and Engineering /Director of Internationa Institute for Resilient Society, Saitama University Prof. Hiroshi Mutsuyoshi

## "IM&VR, presentation of the nation strengthening solution"

"The latest products of FEM analysis series and their functions"

"BIM & CIM world expanded by FORUM8"

## FORUM8 Co., Ltd

### **National Resilience Design Award** NâRDA 15:30-17:00 Award Ceremony for The 3rd National Resilience Design Award

17:00-19:00 Farewell Party

## Mon. 14 - Tue. 15 November

## UC-win/Road

## **Expert training seminar**

Expert training seminar for an agency/consultant

11/14 Mon. 13:00 ~ 17:30 11/15 Tue. 9:30 ∼ 17:30



Refer topage 11 for detail

## Wed. 16 - Fri. 18 November **Exibited System**

Leading-edge VR linkage systems including driving simulators are displayed and demon-



Refer to page 11 for detail

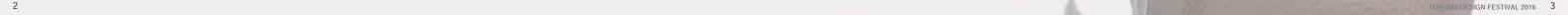
## Sat. 19 November

Golf (Ohtakijo Golf Club )



Sightseeing Technical tour in Yamanashi





9:50-15:30 The 17th UC-win/Road Conference

## The 17th VR Conference



**Opening Ceremony Special Lecture** for The 30th Anniversary of the Foundation

# Autonomous Driving **Conference** METI, MLITT, and NPA give presentations!

UC-win/Road is used for a variety of fields such as road design, vehicle system development, and ITS traffic system research. Nowadays it promotes software and system developments related to ADAS and autonomous driving research developments. In addition to the introduction of the latest functions and cases, "Autonomous Driving Conference" will be held as a new trial, and lectures about domestic and abroad movements, current issues, and prospects.

## Presentation about The era of virtual reality UC-win/Road® 10:00-11:00

## "Past development results of driving simulator "Associated functions of Driving Sim and and VR system, and future vision"

Katsumi Matsuda, Executive Officer and System Sales Manager of FORUM8 A wide variety of demands required for vehicle development. training, and exhibition simulator system are being sophisticated year by year due to the diversification of hardware environments. A lot of features such as Small to large scale driving simulators, multi-axis motion platform, HMD, AR/MR, UAV, brain wave sensor, and linkage system with the biological signal measurement device have been equipped to UC-win/Road since it was released in 2008. FORUM8 will introduce the development results and future vision of UC-win/Road's advanced VR model creation and the simulator system that is making the fullest possible use of Image Generation function

# ADAS, and future development"

Pencreach Yoann, Executive officer and VR Development Manager of FORUM8

With people in the world are trying to develop ADAS and autonomous car, the high performance, flexibility, and expandability of driving simulators has been demanded more and more. In this presentation, UC-win/Road supported by 64 bit is introduced. It has enhanced its features with a focus on CG performance, efficiency of the course creation, freedom degree of the simulation control, multi DS linkage, and cooperation with the car simulation system. In addition, our future challenge and development policy for VR solution are explained.



## Special Lecture 11:00-12:00



Automobile Division, Manufacturing Industries Bureau Director of Electric Vehicle, Advanced Technology and ITS Promotion Office Ministry of Economy, Trade and Industry

Mr. Shuji Okuda

## "METI's involvement in autonomous driving"

Study commission of autonomous driving business has been established in February 2015 in order that Japanese automobile industry leads the world in the field of the autonomous driving that is expected to grow and contributes to the solutions of social issues like car accidents, and necessary works has been considered by the cooperation of the industry, academia, and government.

In this lecture, Mr. Okuda introduces the commission's policy that summarizes current situations and issues of the autonomous driving and, based on it, current efforts of METI such as a new demonstration project in fiscal 2016.

■Profile

Born in February 1974 in Osaka. Finished Graduate School of Energy Science, Kyoto University in March 1993. Joined Ministry of Economy, Trade and Industry (formerly Ministry of International Trade and Industry). Took his current position in June 2016.

## Guest Greeting 13:15-13:30

President of "parliamentary group for considering Automobile
Culture"Member of the House of Representatives

Mr. Keiji Furuya



A member of the House of Representatives, a primary minister who is in charge of national toughening and disaster prevention. Graduated from the faculty of economics of Seikei Univ. and joined a major insurance company. He was chosen in an election of the House of Representatives for 9 times in Gifu's 5 constituency. His actions in the parliamentary group: pres. of the provision team of the Liberal Democratic Party against the abduction issue by North Korea, pres. of the committee for the IT security, pres. of the parliamentary group for promoting informatization education, pres. of the parliamentary group for promoting the next generation energy system, pres. of the motor sports promotion team in LDP, etc. The author of several books

## Special Lecture 13:30-14:30



Director of International affairs, **Engineering Policy Division, Road Transport Bureau** Ministry of Land, Infrastructure, **Transport and Tourism** 

Mr. Hidenobu Kubota

## "Trends of autonomous driving- world movement

about standards of automobile"

Autonomous driving has attracted a lot of attention in the point of view of a comfort and safety. Countries including Western countries are making various plans and studies. On another front, Japanese automakers and parts manufacturers have ability to lead the world in the field of advanced technologies that support autonomous driving skill. The Ministry of Land, Infrastructure and Transport is responsible for deciding standards of car safety and environment, and it also plays an international and hub role in the UN activities of standards decision. Especially in the field of autonomous driving, Japan serves as co-chair with Germany and leads UN activities. In this lecture, based on the above, he explains domestic and international trends of autonomous driving and the role that Japan should undertake.

■ Profile

Born in 1967. He was graduated Earth Resources and Energy Engineering course, Faculty of Engineering of Kyoto Univ. in March 1992, and joined Ministry of Land, Infrastructure, Transport and Tourism (formerly Ministry of Transport) in April. In 2008, he took over as a director of Geneva office of Japan Automobile Standards Internationalization Center (JASIC), and joined activity of automobile standards making in WP29 of UN/ECE by deputy of Japan. Took the current post in July 2015.

## Special Lecture 14:30-15:30



Assistant director of Traffic planning, Traffic Bureau, National Police Agency

Mr. Takashi Ono

## "Review of autonomous driving and considerations for the future"

Relating to vehicles using autonomous driving technologies, he introduces police reviews about Japanese rules issues including Road Traffic Act. Specifically, he explains overview of guidelines for proving tests on public roads about the autonomous driving system and legal and operational issues to solve, after explaining the basic relationship between Road Traffic Act and autonomous driving. He also introduces the current discussions about Geneva Convention on Road Traffic and other international traffic rules.

Joined National Police Agency in April 2001. Experienced the director of Second Investigation Division in Kyoto Prefectural Police Headquarters and Tama Central Police Station of NPA. Took the current post in August 2015.

## 15:45-17:20 Award Ceremony for The 15th 3DVR Simulation Contest on Cloud

# The 15th 3DVR Simulation Contest



Excellent VR data has come to the 15th 3DVR Simulation Contest on Cloud from domestic and overseas. The field is expanding to assessment, disaster prevention and reduction including civil engineering/architecture and traffic/automobile. This is the mustsee event that you can find new possibilities of UC-win/Road.

## presenter

## Mr. Ryuta leiri

He is an architectural IT journalist transmitting information on his blog to solve the business challenges that the construction industry has including the productivity growth, global environmental protection and internationalization etc. by introducing BIM, 3DCAD and informatization construction etc.





## **GRAND PRIX**

Kitsuki City jokamachi (castle town) future proposals

Kitsuki City, Oita Prefecture



**EXCELLENCE AWARD** VR for Rebuilding Ruins

Tho.La.Consulting

The 14th 3D VR Simulation Contest on Cloud

## **Profile of Judging Committee**



Mr. Fumio Seki

Professor of Engineering department, Nihon University

After graduating the department of science and engineering, Nihon University, he joined Corporation and has been engaged in design etc. for road structure, river, harbor and lecture etc. Appointed in the current position since 2011.



Mr. Hiroo Kasagi

Representative of NPO Chiikizukuri Kobo

Director of Japan Society for Impact Assessment, director of Laboratory of Autonomy Problem part-time instructor of Nagano University, CEO of Kizakiko Hot Spring Development Co., Ltd. Councilor of Omachi Kita high school. Author of some books. Won the prize of Minister for the Environment for his activity of global warming in



## Mr. Tatsuoki Inagaki

Director of Pave & Road How-To Way Technology Association

Holding a post of information technology manager at Road Management Technology Center and currently taking on a director of Pave & Road How-To Way Technology Association. Author of some books about pavement engineering and road engineering. He is engaged in improvement of technology of road and pavement and promotion of research development.

## Awards / Prizes

Certificate /book card/

DJI Phantom

(equipped with 4K camera)

Certificate/trophy 15.6 inch gaming book card



Certificate/ MSI netbook computer/ book card

Certificate/book card/ Omnidirectional

camera THEATA S

Plaque/book card

11/5 Sat. - 11/13 Sun. Period of public voting on cloud

URL: VRcon.forum8.co.jp

## Install VR-Cloud®



Brawse and operate VR data

Public voting



http://vrcon.forum8.jp/index-e.htm and click the banner to join voting!

## Reward to all our valuable users who voted on cloud

We will grant 1000 FPB points to all users that viewd and voted for online their favorite VR data. which are submitted for the contest's evaluation. shown on the webpage that can be accessed from their User Information Page!





## 17:20-18:00 Book Launching Lecture (The books are written in Japanese.)

## "Learning Road & Pavement Construction **Engineering Through VR"**

President of Pave & Road How-To Way

Technology Association (Paroway Tec)

## Mr. Tatsuoki Inagaki

Japanese social capital is changing drastically to aim to "supersmart society" where top science technologies are converging. Japan has pavements that is about 6 thousands km long and 60 trillion yen as total assets, and they are also changing as well. From the evaluations and reviews of the history and current situation, this technical book describes pavements toward the super-smart society that is making full use of IoT and AI, and practical knowledge such as investigation, diagnosis, design, and construction.

Written by Tatsuoki Inagaki, President of Pave & Road How-To Way Technology Association (Paroway Tec) / Published by FORUM8

## "BIM & CIM world expanded by FORUM8"

## Construction IT World

## Mr. Ryuta leiri

"What we can do by CIM" will increase by a variety of solutions of FORUM8 such as CIM tool including UC-win/Road, UC-1 series and systems linked with VR and hardware! In addition to for efficiency and cost reduction, this CIM practice book is for advanced and wide business development more than figure and CG creation.

Edited by Rtyta leiri (Construction IT World) / Publishe by Kensetsutsusin Shimbun Corporation

## "Safe and secure pictograms"

"Refuge Guidance Sign Total System (RGSS) Guidebook"

Director of NPO Sign Center

## Mr. Yukio Ota

Two complementary technical books that cover signs related to social safety and security are published. One is a book named "Safe and Secure pictograms" and it reviews adjustability of pictogram design. The other book is named "Refuge Guidance SignTotal System" and covers basic designs and plans of evacuation guide sign and show practical usage.

Written by Yukio Ota, Director of NPO Sign Center / Published by FORUM8 Publishing

### 18:00-20:00 Networkeng Party, Book Launch Sale (Venue: Foyer)

Authors and editors will deliver lectures At the time of unveiling of FORUM8 books. VR game event will also be held and participants can get a good bonus.



### 9:50-11:00 The 17th UC-win/Road Conference

## The 17th VR Conference



FORUM8 has promoted further VR utilization study and development through the collaboration between "World 16" by researchers in the world and State of the Technologies in Expression Association, the business integration with CRAVA Inc., the academic-industrial cooperative project with MIT, and the business collaboration with the architectural competition website Arcbazar. We introduce these activities and Professor Yoshiyuki Kawazoe from Tohoku University delivers a special lecture.

## Special Lecture 10:00-11:00



**Professor, New Industry** Creation Hatchery Center, **Tohoku University** 

Mr. Yoshiyuki Kawazoe

"Break the mold - cognitive ability of human and its limit as the design

Displays have gotten high-definition rapidly thus the number of our visual cells on the retina has reached its limit against 8K television, and subliminal effect that was used in advertising has been prohibited in the broadcast. It's time to review the design itself from the foundation. Prof. Kawazoe starts this lecture with the erroneous example of the common sense that the moon is the earth's satellite. He also deals with topics of the vehicle that moves smoothly with triangle tires to seek drastic new design policy scientifically and psychologically.

A doctor of nuclear theory in Tohoku University. He became an emeritus professor in the metal material laboratory after he experienced the professor. A professor of New Industry Creation Hatchery Center in the university. He also acts for the conference of the Asian Consortium on Computational Materials Science

11:00-12:00 The 4th Cloud Programming World Cup Final Judgement The 6th Virtual Design World Cup Final Judgement



Mr. Yuji Abe

# The 4rd CPWC/ The 6th VDWC

The 6th VDWC is a competition of advanced architecture and civil engineering design. The 4th CPWC is a programming skill competition of a cloud application. Students in the world create works for VDWC and CPWC every year. You can see many works with full of ideas and students presentations at the final judgement.

Put your programming skills of 3DVR Cloud application to the test with FORUM8's Software Development Kit (SDK)!

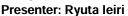
# Cloud Programming World Cup



The 3rd CPWC Nominated works announcement

## Host -

Born in Tokyo in 1958 and graduated as Political Science and Economics major from Waseda University. He has currently taken successive lead roles as a reporter in various Japanese TV programs such as "Variety show Sukkiri!!". He is known for his competence in English, his ability that helped him become a professional private teacher who helped his students pass an entrance exam to many prestigious schools and also helped him interview Hollywood stars visiting Japan without an interpreter.



Cloud-based design competition for civil engineering and construction works with BIM/CIM and VR!

## Virtual Design World Cup

"Extension of the central city Melbourne"

Ideas for urban design in Fishermans Bend Urban Ren





The 6th VDWC Nominated works announcement

## **Judging Committee**



Associate Prof. Tomohiro Fukuda (Head of judges and associate professor from the Graduate . School of Engineering Osaka University)



Narahara Taro (Associate professor from the College of Architectural Design, New Jersey Institute of



Mr. Hiroyuki Hakura (Designated professor of Digital Hollywood University, Gradua



Mr. Yoann Pencreach (Chief Manager of VR development group, FORUM8)

## Judging Committee -



Prof. Yasushi Ikeda (Chief of executive committee of VDWC Graduate School of Keio University, Representative of IKDS)



Mr. Hiroyuki Hakura (Kostas Terzidis Harvard University, USAI)



Mr. Hiroyuki Hakura (Director of NPO Civil Machizukuri Station, Director and Chairman of Civil NPO Collaboration Platform)



Mr. Hiroyuki Hakura (National Chiao Tung University.

## 13:15-15:15

## The 9th International VR Symposium The 2nd State of the Art Technologies in Expression Association / Latest Contents Sessions / CRAVA Inc.





State of the Art Technologies in Expression Association introduces their activities such as a variety of projects utilizing leading-edge expression technologies like VR and curriculums related to expression technologies. CRAVA Inc. describes cases of video game contents and systems that apply the VR technology.



President of The Association of State of the Art Technologies in Visual Expression

## Mr. Satoshi Machida

## "Efforts to utilize leading-edge expression technologies"

The Association of State of the Art Technologies in Visual Expression engage in a variety of activities that utilize advanced expression technologies such as 3DVR and projection mapping. He looks back on the association's activities of this year and explains "the simulation of debris avalanche by using UAV's aerial video at the time just behind Kumamoto earthquake" as the social action program. He also provides information about education and exams related to the expression technologies.

### ■Profile:

A part-time advisor of FORUM8, President of The Association of State of the Art Technologies in Visual Expression. He also acts as CEO of AmbientMedia, producer of contents service, a consultant of projection mapping, digital signage, AR and 3D media, an advisor of URCF, and an advisor of Projection Mapping Association. Author of several books.





President of CRAVA Inc. Mr. Kurato Kazuki

## "The Possibility of VR in game industry"

He has provided "UC-win/Road Rose Online" and "Urban air walk", which is the experience of flight in VR space by 6K multi cluster digital signage and Kinect, as the collaborations between FORUM8's VR technology and CRAVA's game contents. In this lecture, he describes the process of work flow construction and production by using UC-win/Road features. He also explain application example of UC-win/Road Train Simulator from the view of game industry.

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### 15:30-17:30 **Award Ceremony for**

The 4th Cloud Programming World Cup The 6th Virtual Design World Cup The 2nd Junior Software Seminar

Cloud Programming Cup Prize Judge's special prize Nominee's prize

Cloud Programming Cup Prize Excellent prize Judge's special prize Nominee's prize



## Special Lecture 15:30-16:00

## "ArcBazar x ProjectVR"

"Arcbazar" is a cloud sourcing website that clients can hold architecture design competitions and was started in MIT. "Arcbazar+ProjectVR" is a service that "ProjectVR", the system that supports evaluation and decision making in the view of sustainability, is added on to "Arcbazar". They introduce a breakthrough system of "Arcbazar" and "Obama Center Competition" in June this year. In addition, the mechanism of "Self-Assessment site" and "ProjectVR" that utilizes VR-Cloud® are also explained.



**Arcbazar CEO** Mr. Imdat As

Founder of Arcbazar. Being in the front line of the architecture cloud sourcing with Arcbazar, he decides company's vision and strategy, and takes command for its growth. His purpose is to provide original world wide access to the high-quality architectural resource filled with imagination and renew the previous experience about home designs. He has received Master of Architecture at MIT and Ph.D at Harvard Graduate School of Design.



CEO of NPO Workshop for Sustainable Community

## Mr. Hiroo Kasagi

Commissioner of Environment Assessment Committee, commissioner of Institute of Local Governments, Part-Time Instructor at the Nagano University, executive officer of Kizaki lake onsen development Co.Ltd. councilor of Nagano Ohmachi Kita High School. Author of several books. He was awarded with the 2013 Global Warming Prevention Ambassador



Excellent works created in "Junior Software Seminar" are awarded.











17:30-19:30

Networking Party (Venue: Trattoria Italia Shinagawa) Shinagawa Intercity B annex 1F, 2-15-1 Konan, Minato-ku, Tokyo



## 13:15-15:15 The 9th International VR Symposium

# The 9th VR Symposium



VR usage proposals has been presented and discussed at the International VR symposium by World16 consisting of architecture, civil engineering, and urban plan researchers around the world. So far, it has been held in Phoenix, the US (2008), Hakone, Japan (2009), Santa Barbara, the US (2010), Pisa, Italy (2011), Hawaii (2014), and Thessaloniki, Greece (2015). This time, Yoshihiro Kobayashi from Arizona State Univ. hosts the symposium as the place of research and development presentation of summer workshop in Osaka in July 2016.



Mr. Yoshihiro Kobayashi



## Mr. Taro Narahara New Jersey Institute of Technology

Using a microcomputer board "Ardrino" that are often used for STEM education in the United States, he introduces the device creation and programming method to control UC-win/Road by using data from sensors.



Planning and management tools required for starting application developments and sales business of a cloud service by using map information in iPhone and Android.



## Mr. Matthew Swarts Georgia Institute of Technology

He demonstrates asynchronous communication from a browser to UC-win/Road with Web socket. VR tools utilizing a gyro sensor of smartphones can be operated and it is expected to be applied widely to entertainment



His work is the generation of architecture models by using a tool that create 3D models from multiple images. He explains key points to create more precise data.



Mr. Marcos Novak University of California

How an artificial intelligence builds a VR space. Using deep learning method, he explains the VR space creation method by the artificial intelligence that learned art styles



Chile government is constructing the system that autonomous trucks transport ores from underground copper mines. He explain the way to visualize tunnels inside the mine in VR.



Mr. Ron Howker University of Alberta

In this project, the world of The Fifty-three Stations of the Tokaido, the ukiyo-e by Hiroshige Utagawa, is ported to VR space. He explains process and points of VR space creation with the Canadian interpretation of Japanese





Mr. Amar Bennadji Robert Gordon

He introduces the archive creation of historical buildings by using point cloud data and how to correct colors and data of unextracted parts by UC-win/Road.



## Mr. Wael Abdelhameed University of Bahrain

How to construct a system to display measured data like energy effectiveness in each rooms by searching in VR space. He also explains MicroSimulation tool in UC-win/ Road and original creation method of XML data.





Mr. Paolo Fiamma Università di Pisa

Overview of the new BIM education that starts in Università di Pisa is introduced. Using the example of the linkage between UC-win/Road and AllPlan, he also explains details and way of data conversion (mainly IFC) that integrates VR and BIM.



Mr. Sky Lo University of Victoria

He introduces a WebCAD tool that can review designs on the web and how to create VR 3D data based on the architecture plan generated by this tool.

## Fri. 18 November

9:50-15:15

## The 10th Design Conference Seismic, Geotechnical and Water Works Sessions



# **The 10th Design Conference**

The urgent political issue in Japan is how we improve productivity in preparation for the aging society with fewer children. Generally speaking, we need not and cannot maintain all public institutes in the depopulating society. We have to make a choice of investment among roads and public buildings. Meanwhile, on a cost-benefit basis in the expected aging society, public investment for core cities conversion to compact cities in order to increase productivity of medical and nursing care will have the priority. In addition, the determination of priorities of public investment with the focus on the cities age structure will also be important. In such situation, we can also be guided by the high-precision analysis with software technology and the verification by virtual reality that focuses on human motion.

## Special Lecture 10:00-11:00



a member of the House of Representatives Mr. Keiichiro Asao

## "Public works that contribute to the productivity improvement in the depopulating society"

The urgent political issue in Japan is how we improve productivity in preparation for the aging society with fewer children. Generally speaking, we need not and cannot maintain all public institutes in the depopulating society. We have to make a choice of investment among roads and public buildings. Meanwhile, on a cost-benefit basis in the expected aging society, public investment for core cities conversion to compact cities in order to increase productivity of medical and nursing care will have the priority. In addition, the determination of priorities of public investment with the focus on the cities age structure will also be important. In such situation, we can also be guided by the high-precision analysis with software technology and the verification by virtual reality that focuses on human motion.

In the 3rd terms as a member of the House of Representatives (and was selected for 2 times in the House of Councilors). Graduated from Faculty of Law of the University of Tokyo. He got MBA in Graduate School of Business of Stanford University during he worked for The Industrial Bank of Japan, Ltd. He holds "Association for Japanese vision" every month.

## Special Lecture 11:00-12:00



Fire Safety Engineering Group (FSEG) **University of Greenwich** Prof. Edwin Galea

## "The latest cases and simulations of evacuation analysis and security measures"

The evacuation/crowd analysis simulation software EXODUS/SMARTFIRE developed by Fire Safety Engineering Group in University of Greenwich has simulated a lot of major institutes in the world. In this lecture, he explains possibilities of analysis result simulation such as the latest functions of the software. UrbanEXODUS that supports urban scale evacuation simulation, the latest information of the project that utilizes the training system of special forces against airport terror, and the case that UC-win/Road and EXODUS were used for the airport evacuation analysis with CCTV monitoring system.

## ■Profile:

Professor Galea is the founder of the Fire Safety Engineering Group (FSEG) of the University of Greenwich. This is the place where the highly-accurate evacuation analysis software EXODUS was developed. It is also a major source of many prominent papers and published works regarding evacuation analysis, while also starring numerous times in major companies such as BBC or ABC.

## Special Lecture 13:15-14:15



**Professor of Graduate School** of Science and Engineering / **Director of International** Institute for Resilient Society, Saitama University

## Prof. Hiroshi Mutsuyoshi

## "Transition of bridge technology - toward a tough and long-lasting bridge"

Bridge technology in Japan had been imported from Europe formerly. In recent years, however, many bridges originally developed in Japan has been constructed in view of the example of extradosed bridge and PC bridge. Meanwhile, it has caused a new problem of the aging of the bridge. In this lecture, Prof. Mutsuyoshi describes the new bridge technology that he developed and the latest study cases about bridge durability and maintenance that are controversial.

Information about new specifications for highway bridges will also be provided.

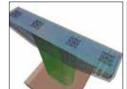
Finished his master's study in Graduate school of the University of Tokyo in 1978. Became a professor of Saitama University in 1996 and there in 2016. He also acts as a director of International Institute for Resilient Society of Saitama University, a doctor of engineering, professional engineer, and ACI (American Concrete Institute) Fellow from 2016.

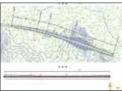
## IM&VR, presentation of the nation strengthening solution 14:15-15:15

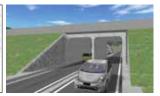
"The latest products of FEM analysis series and their functions" "BIM/CIM world expanded by FORUM8"

BIM/CIM models spread year by year, and FORUM8 is providing solutions focus on VR and structure design/analysis. FEM series products as IM & VR solution and nation strengthening solution support BIM/CIM. We introduce the advanced analysis functions of 2D non-linear analysis for RC structures WCOMD Studio and the elasto-plastic and flow analysis GeoFEAS Flow 3D as the new products of FEM series.

We also explain the design case of grade separated crossing created by UC-win/Road + Allplan that was selected and used for CIM solution by JACIC.









# 15:30-17:00 Award Ceremony for The 3rd National Resilience Design Award

# The 3rd National Resilience Design Award

"National Resilience Design Award" is the place to provide information and to improve skills by assembling concrete cases and results which is helping to strengthen the national land. Various brilliant works for strengthening of national land in the field of structural analysis (civil engineering and construction), ground and water engineering, and disaster prevention will be introduced.



Prof. of Graduate School of Science and Engineering / Director of International Institute

Prof. Hiroshi Mutsuyoshi

13:15-14:15 for Resilient Society, Saitama University Information about new specifications for highway bridges will also be provided. "Transition of bridge technology - toward tough and long-lasting bridge"

## Awarded works of The 1st NaRDA

## Grand Prix

"Specifications for highway bridges applied seismic verification and reinforcing study for 40-year-old batter brace ramen bridge"

- The best effective and economic method among seismic isolation damper and buckling restrained braces etc. –

Tonichi Design Consultant Co., Ltd.

program Engineer's Studio®



タイプ || 橋軸方向加震時の照査結果

## program Engineer's Studio®

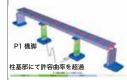
Grand Prix

## **Excellent Award**

"Study of how bucklingrestrained bracesaffect at the time of earthquake at right angle to pier axis" - Reinforcing measure for girder bridge by using seismic

i solation damper - Yokogawa Sumikin Bridge Corp. Yokogawa Sumikin Bridge Corp.

program Engineer's Studio®



## **Excellent Award**

- Series of analysis of earthquake

"Intelligent seismic reinforcing design method of sewerage institution for national resilience"

Awarded works of The 2nd NaRDA

and tsunami against coastal sluice gate -

"Seismic performance verification considering

the level 2 earthquake and tsunami load"

- Non-linear FEM analysis of a tank with inspissated polluted mud -

A x C Co., Ltd

RATECH Co., Ltd

program Engineer's Studio®



## Profile of Judging Committee -

Mr. Hiromichi Yoshikawa Chief of the judging committee Professor of Earthquake Disaster Mitigation Engineering, Tokyo City University

Visiting professor of Colorado University (1992-93). Graduated from Department of Science and

Engineering.

A doctor of civil engineering and a specialist of aseismic engineering, earthquake risk, and armored concrete.

Won the literature award and Yoshida award of Japan Society of Civil Engineers. Author of some books.



## Mr. Masaru Morita

Vice-president of Shibaura Institute of Technology, Professor of Urban Environmental Engineering Laboratory, Civil Engineering Department, Shibau Institute of Technology

Professor of Department of Civil Engineering Shibaura Institute of Technology. Specialist of urban hydrology and groundwater hydrology. Currently he researches risk management of a

The author of a book about groundwater.



Mr. Masaru Morita

Professor of Science and **Engineering Department, Gunma** University

3D bar arrangement

Member of Department of Environmental Engineering Science of Gunma University. He studies in a disaster prevention of ground, various ground movement, and interaction between ground and a structure especially focus on a prediction by computers

## Awards / Prizes

Certificate / trophy 15.6 inch netbook



Certificate/ Omnidirectional camera THEATA S/ AMAZON gift card

Plaque/

AMAZON gift card

3D bar arrangement

Semi-Grand Prix Certificate/netbook computer/ AMAZON gift card



## Object Project

## FEM Analysis UC-1 series Analysis Support Service



17:00-19:00

"Farewell Party" (Venue: FORUM8 Tokyo head office)

3D bar arrangement

Farewell party will be held at FORUM8 showroom after all session. The 11th FORUM8 DesignFestival 2017 (planned to be held on 15-17 November 2017)

## Wed. 16 - Fri. 18 November



## Mini Driving Simulator

## Satisfy advanced simulation demands

This simulator can reproduce a variety of driving environment under fully controlled situation. It has been used for vehicle system development, ITS traffic system research, and interaction study among driver, vehicle, road, and traffic so far.

Leading-edge VR linkage systems including driving simulators are displayed and demonstrated.



## UC-win/Road by V-Wall+VICON

3DVR and high-precision tracking sensor provide very realistic driving simulation.



## Blue Tiger Flight Simulator Fusion of VR and game

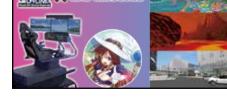
A system that supports the flight simulation linked with UC-win/Road. It is equipped with 2 axis motion and controller.



## Brain Wave Driving **Simulator**

## with 4K organic EL curved monitor

For this driving simulation on UC-win/Road, Mindwave Mobile, the measuring device for brain wave is used.



Oculus Rift





## SENSO driving simulator Steering controled autonomous driving on UC-win/Road





3D model and projection mapping x VR



•3D Physical **Modeling Service** 





●VR-Cloud® 3DVR on Cloud



Ultra Micro **Data Center** 



**●Engineer's Studio**®



•3D bar arrangement CAD



Seismic Simulator



Special event for Premium Users of FORUM8 products

Golf Competition/Technical tour in Yamanashi

Premium users of FORUM8 products are invited.

## Sat. 19 November



Application

Please tell your contact person of FORUM8 staff if you join each of these.

## **Technical tour in Yamanashi** Sightseeing "Learn about Japanese castle and Ninja" Course: Takeda Temple, Oshino Shinobinosato, Gotemba Premium Outlets Time: Leave Shinagawa Station at 8:00 / Arrive at 20:00

Candidates: Participants of Design Festival Day1, Day2, Day3 Premium users or Gold users of FORUM8 products as of August and September in 2016

(Up to 1 user for 1 company.

If there are many applicants,

a lottery will be held to choose the lucky ones)

\*You can either choose the tour or the golf competition but not both. **%FORUM8** will pay the cost of tour itself.

However, applicants are responsible for the travel fee to the gathering spot.

## Site Information

## **Access Map to SHINAGAWA INTERCITY Hall**

Ikebukuro

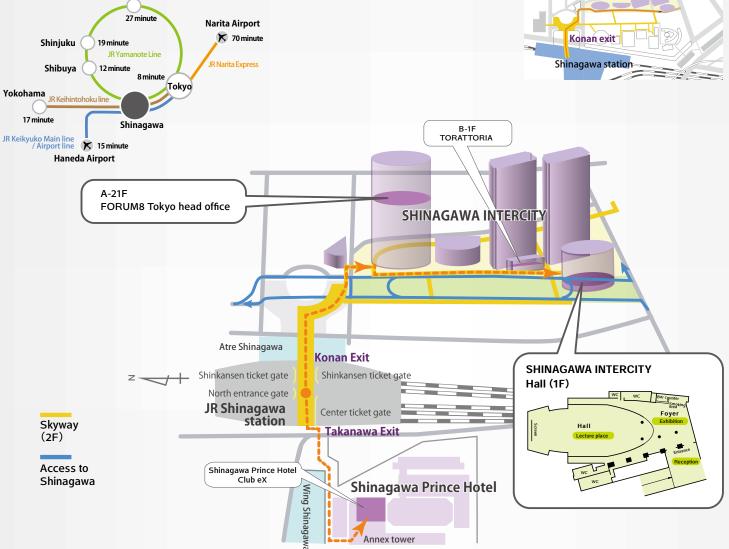
8 minutes walks from Konan exit of Shinagawa station (Tokaido/Sanyo Shinkansen, JR Yamanote line, Tokaido line, Yokosuka line, Keihintohoku line and Kyokyu line)

 ${}^*\textit{There}\, is\, no\, designated\, parking\, area.\, Please\, use\, public\, transportation\, or\, public\, parking\, area\, surrounding\, the\, hall\, properties of the properties of th$ 

## Address of SHINAGAWA INTERCITY

2-15-4, Konan, Minato-ku Tokyo 108-6105 TEL: +81-3-3474-0461 http://www.sicity.co.jp/







Access route from Shinagawa Station to Shinagawa Intercity and the inside of the hall can be seen on VR-Cloud®



## To view guidance to the venue and annotations on each and every location of interest within the venue

Go to "Participate" > "View discussions" or "View annotations". When you click the list, you will be able to view annotations on each location of your interest.



## FORUM8 Co., Ltd.

Entire organization certified to ISO27001 (ISMS) Entire organization certified to ISO22301 (BCMS)
Entire organization certified to ISO9001 (QMS)





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