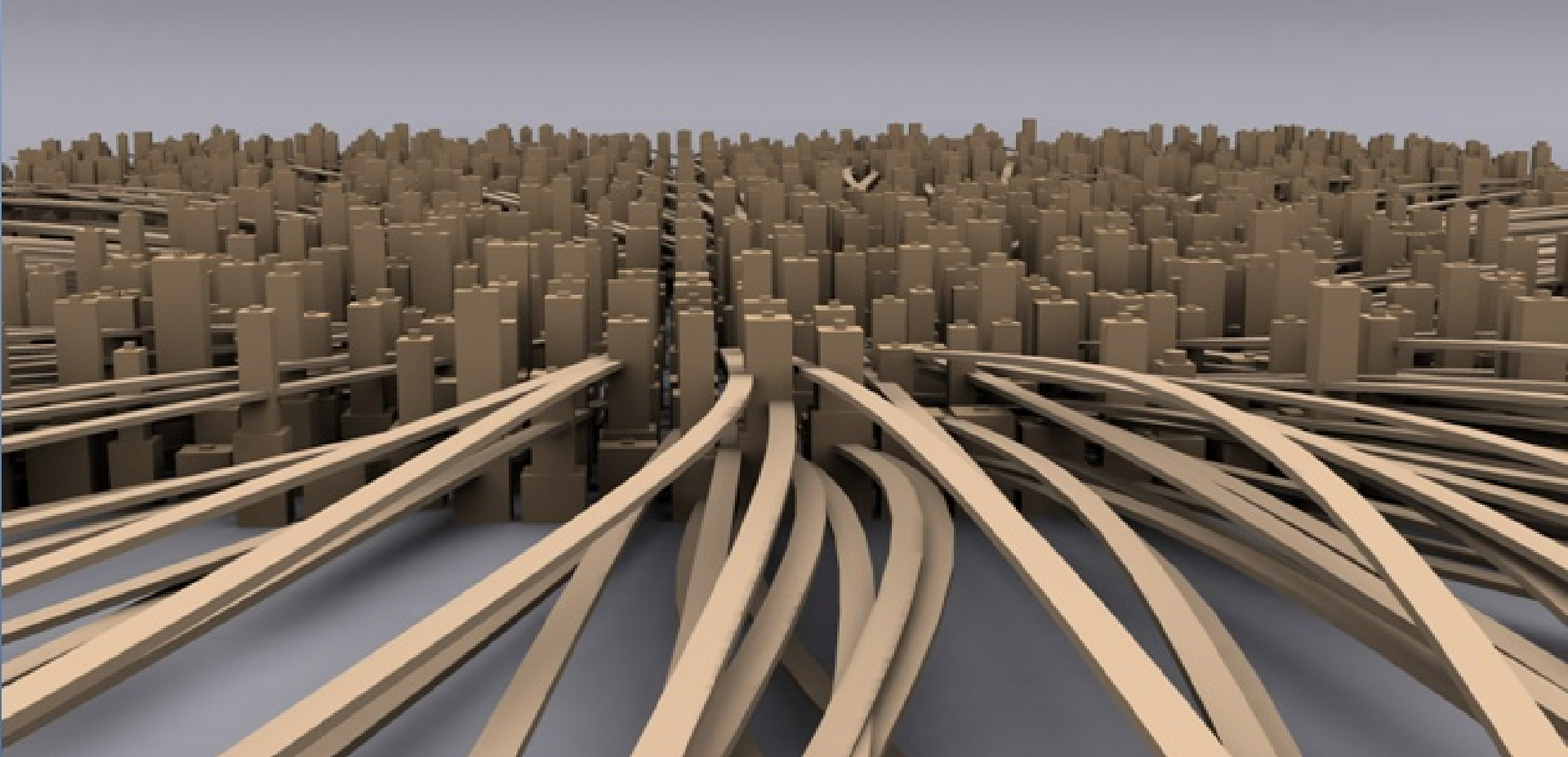# The 7th International VR Symposium
第7回　国際VRシンポジウム

2014年11月21日（金）
Forum8 Seminar Room

WORLD16

World16 is a world-wide professional group of sixteen researchers who are exploring different aspects of VR city modeling and visualization.
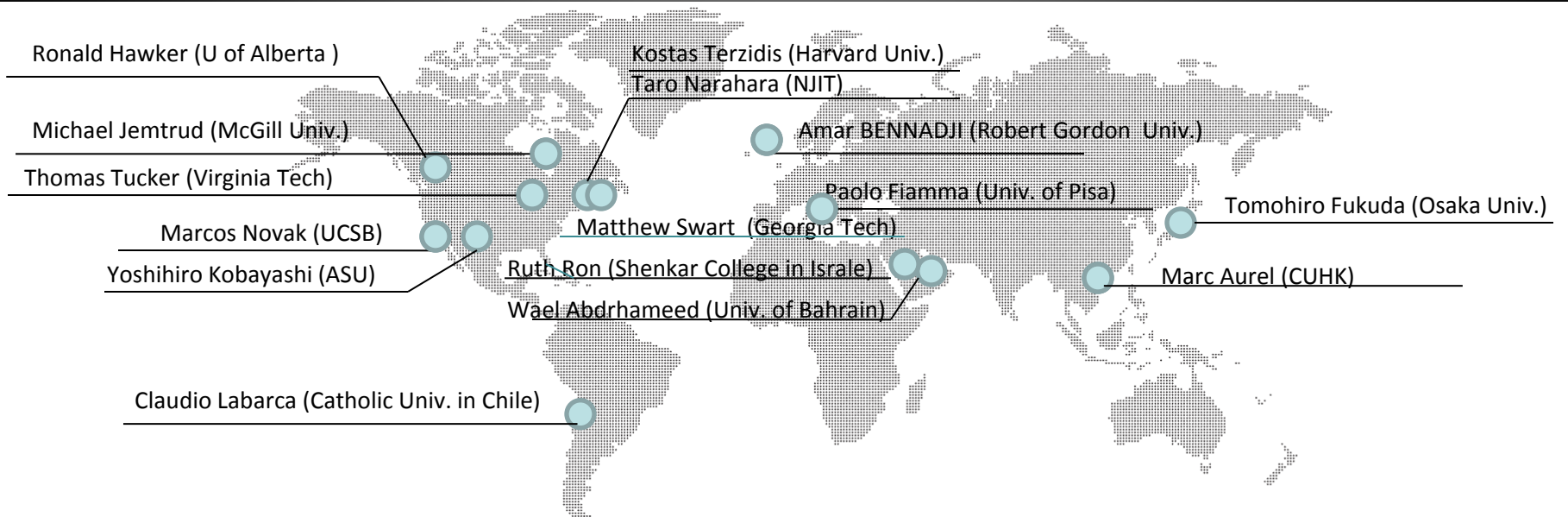
MISSION: Develop and demonstrate VR city models and the applications using a common VR platform (UC-win/Road)

- **Summer workshop**: Brain Storming and Proposing new projects
- **VR symposium** : Display the results at the Design conference

VALUE:

- Accumulate knowledge and skills of VR applications among the group by sharing the developed tools and methods.
- Publish technical papers and demonstrate the results at the conferences; CAAD Future, CONVR, SIMAUD, ACDIA, Siggradi, eCAADe, CAADRIA, etc.

Ronald Hawker (U of Alberta)

Kostas Terzidis (Harvard Univ.)

Taro Narahara (NJIT)

Michael Jemtrud (McGill Univ.)

Amar BENNADJI (Robert Gordon Univ.)

Thomas Tucker (Virginia Tech)

Paolo Fiamma (Univ. of Pisa)

Tomohiro Fukuda (Osaka Univ.)

Marcos Novak (UCSB)

Matthew Swart (Georgia Tech)

Yoshihiro Kobayashi (ASU)

Ruth Ron (Shenkar College in Israle)

Marc Aurel (CUHK)

Wael Abdrhameed (Univ. of Bahrain)

Claudio Labarca (Catholic Univ. in Chile)

2007 Nov.   1st VR International Symposium

2008 Aug.   1st VR Summer Workshop in ASU

2008 Nov.   2nd VR International Symposium

2009 May   World16 Invited Lectures

2009 Jul.   2nd VR Summer Workshop in Hakone

2009 Nov.   3rd VR International Symposium

2010 Jul.   3rd VR Summer Workshop in UCSB

2010 Nov.   4th VR International Symposium

2011 Jul.   4th VR Summer Workshop in Pisa & Venice, Italy

2011 Nov.   5th VR International Symposium

2014 Jul.   5th VR Summer Workshop in Hawaii + 6th VR Symposium

2014 Nov.   7th VR International Symposium

3rd International VR Symposium
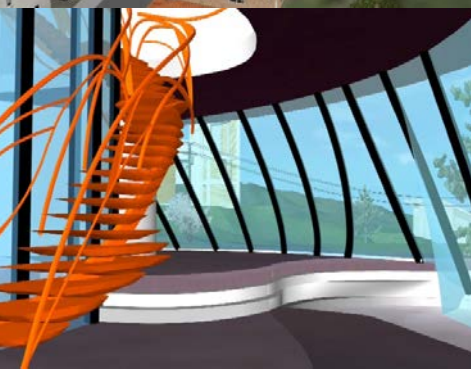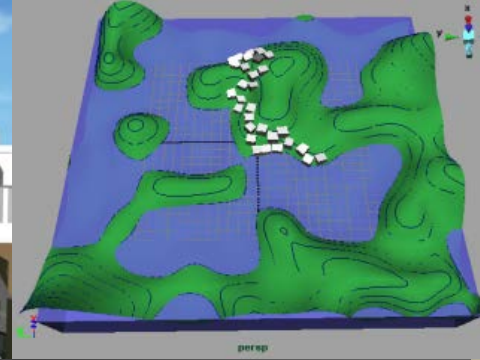
FORUM8AZ.COM
Management and support of World16 members' projects

FORUM 8 AZ

World16 VR research group in Venice, Italy

World16 is a global working group of professors engaged in research using virtual reality technology. Knowledge and data is shared using Forum8 software UC-win/Road as a common visualization platform.

Forum8 AZ manages research teams and coordinates two annual meetings in-person: a summer workshop in which VR projects are outlined and new technologies are shared, and a fall symposium in Tokyo at which the research results are presented.

Forum8 AZ maintains a tutorial blog at which new techniques for creating data in UC-win/Road are shared to researchers and the public: Visit the blog HERE.

world16

UC-win/Road was used in this research by Prof. Amar Bennadji of Robert Gordon University to visualize an urban design proposal to the University campus and surrounding traffic congestion issues.

This project, headed by Prof. Taro Narahara of the New Jersey Institute of Technology, focuses on real-time synchronization of a physical interactive interface and UC-win/Road 3D simulation software.

This World16 project, headed by Prof. Matthew Swarts of Georgia Tech and Prof. Ruth Ron of University of Florida, was developed in order to visualize the extent of highway noise pollution in downtown Orlando, Florida. The simulation shows what areas are most seriously affected and would benefit from the placement of sound reflective barriers, trees, or other intervention.

This project by Wael Abdelhameed at the University of Bahrain uses UC-win/Road's Micro Simulation Player to visualize two different construction plans for the same building site.

Use of this tool allows project management and construction stake holders to explore various construction scheduling issues and design plans in a fully interactive 3D environment.

This project, developed by Prof. Taro Narahara at the New Jersey Institute of Technology, involves the creation of a tool that simulates pedestrian movements in real-time.

This software was then connected to the 3D Virtual Reality software UC-win/Road so that pedestrian movements could be represented by 3D character models in an urban environment.
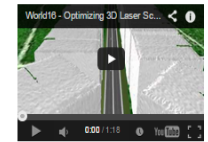
Tomohiro Fukuda, Professor at the Graduate School of Engineering at Osaka University, heads this research which is based on optimizing 3DLS (3D Laser Scanner) data for VR environments.

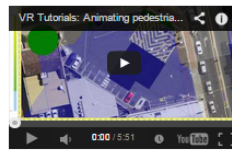### VR Design Studio (formerly UC-win/Road):

Importing WAP Terrain into UC-win/Road

Placing roadside objects in UC-win/Road

Using model visibility layers in UC-win/Road
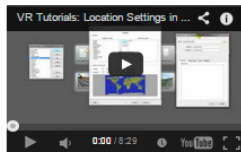
Animating pedestrians in UC-win/Road

Exporting AVIs and BMPs from UC-win/Road
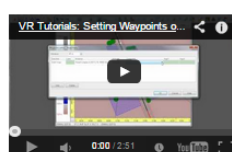
Importing models from SketchUp to UC-win/Road

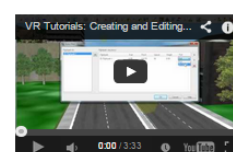Using visual options in UC-win/Road
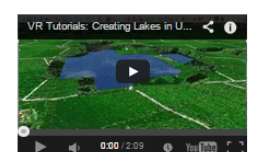
Setting location settings in UC-win/Road

Loading 3DS models into UC-win/Road

Setting waypoints on a flight path in UC-win/Road

Creating and editing flight paths in UC-win/Road

Creating lakes in UC-win/Road

World16 - Phase 2
"From Connection to Integration"

PHASE 1: 2007 – 2011
        To share the knowledge and develop connections

PHASE 2: 2014 –
        To develop brand values and educational project templates

Summer Workshop 2015 in Hawaii

Mapping JAM
7/9 – 11, 2015
Hilton in Honolulu (Rainbow Tower 2F)

It was to develop projection mapping works in 48 hours. We created five projects and demonstrated them at the 5th VR Summer Workshop in Honolulu, Hawaii. The tutorial and report is available at the end of this session. The project is also reported at
ieiri-lab.jp/it/2014/07/48hr_projection.html **(建設ITワールド）**

Schedule

9:30-12:00 （各15分）	「Drone&VR　～UAV（無人飛行体）による3Dモデリング研究」 　　ジョージア工科大学　マシュー・スワーツ 氏 「コウモリの洞穴研究におけるレーザースキャナ、VRの活用」 　　バージニア工科大学　トマス・タッカー 氏 「オーガニック・パーキング　～クラウド型駐車場予約システム」 　　ハーバード大学 准教授　コスタス・テルジディス 氏 「VR-Cloud®を用いたリアルタイム都市計画システム」 　　大阪大学大学院工学研究科 環境・エネルギー工学専攻　准教授 福田 知弘 氏 「インタラクティブデバイスとVRの連携事例」 　　ニュージャージー工科大学建築デザイン学部　准教授 楢原 太郎 氏 「イタリア・ピサにおけるVR活用研究」 　　ピサ大学　教授 パオロ・フィアマ 氏 「VRによるオンライン教育研究」 　　ロバートゴードン大学　助教授 アマル・ベンナージ 氏 「古代文化研究へのVR適用例」 　　アルバータ大学　副主任教授 ロン・ホーカー氏、ロン・アリア 氏 「4D建設プロジェクトにおけるVRの適用」 　　バーレーン大学　准教授 ワエール・アブデルハミード 氏

Contact

CHAIR, WORLD16
Yoshihiro Kobayashi, PHD
dr.yoshihiro.kobayashi@gmail.com