

NewsLetter



Issue No. 3, Vol. 10 - February 2017

Youth Activities at the XXIII
ISPRS 2016 Congress

Summer School in
Diyatalawa, Sri Lanka

WEBCON6 Winners at the
ACRS 2016

THE TEAM BEHIND THE ISPRS-SC

INTERGED 2016: Sensors,
Technologies and Instruments

CLOSE RANGE SENSING TECH-
NIQUES IN ALPINE TERRAIN
*(Summer School 2017
at Innsbruck, Austria)*

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ISPRS SC NewsLetter



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Frontpage designed by *Angelica Monzon*



Would you like to join SC Newsletter team? Do you want to make a difference?
Want to learn new skills?

SC Newsletter is at a stage where getting broader and better demands more people to be involved in the process of it's formation. That's why SC Newsletter team is looking for the following volunteers:

- More **people who would be willing to prepare articles** for existing or new rubrics,
- Designers of Newsletter

If you can help us with any of the above, please let us know!

info@isprs-studentconsortium.org

And also...

If you **would like to publish your research work** in the SC Newsletter send us your abstract on email written above. We will soon contact you for further information.

Dear ISPRS SC Newsletter readers,

Greetings of peace! It is with great privilege to take on the role of delivering news & updates to a fantastic community of students and experts of geospatial technologies. Ayda Aktaş (Istanbul Technical University) has accomplished a great job leading the previous Newsletter team and I am humbled to be given the opportunity to fill-in for her starting with this issue. I hope to be of useful service to this community with the support of the rest of the board.

Anyway, let our time of fun begin! We open this issue by looking back at the youth events at the ISPRS Congress in Prague last July 2016 and highlight the successful conduct of activities lead by our enthusiastic members of the ISPRS-Student Consortium (ISPRS-SC). We also take this opportunity to introduce the new board members of the SC that were elected during the Youth forum section during the SC general assembly at the Congress. In knowing the people who will be behind the steering wheel of the ISPRS-SC in the next four years, we hope to start an active interaction and collaboration between the members and the board.

To kick off 2017, the SC is brewing exciting developments for the SC members, readers and colleagues alike. Some of which include:

- We will be slowly repackaging the contents of the Newsletter to better capture the interests and serve the needs of our readers. Stay tuned for the upcoming issues!
- We are looking forward to hear from you through our social media channels! We have re-launched our official Twitter (@ISPRS_SC) and Instagram (@ISPRSSC) accounts to engage the growing community of students and young professionals with news, developments, upcoming events, polls, and Q&As from featured scientists from time to time. We hope that through these channels, each member may feel that s/he is a step closer to our community.
- Bigger and better ISPRS related events and activities that will boost knowledge and career developments of students and young professionals from our field.

We hope that you are as excited as we are with these upcoming events. In behalf of the board, we look forward to be of service to you!

Angelica Kristina Monzon
Newsletter Editor-in-chief
2016 - present

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Lets make the world smaller!
Engage with our global network of experts and be empowered.

Join the ISPRS Student Consortium Today!

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Youth Activities at the XXIII International Society for Photogrammetry and Remote Sensing Congress (ISPRS Congress 2016)

Shery Rose Reyes

PhD Student; ISPRS SC Chair (2016 to present)
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The XXIII International Society for Photogrammetry and Remote Sensing Congress (ISPRS Congress 2016) was held in July 12-19, 2016 in Prague, Czech Republic. The organization of this quadrennial event was led by Congress Director, Dr Lena Halounavaand ISPRS.

The ISPRS 2016 Congress hosted a number of student activities: (1) Summer School, (2) Youth Forum, (3) Panel Discussion and (4) General Assembly.

SUMMER SCHOOL

The Summer School was held in Telč, Czech Republic from July 5 -11, 2016, with the theme, “Natural Resource Management: From Data Processing to Web Publishing.” The Summer School was organized by Ing. Eva Matoušková, Summer School Director for the ISPRS Congress. The participants came from different continents: North and South America, Africa, Europe and Asia. The lecturers were comprised of Dr. Martin Isenburg (rapidlasso GmbH), Dr. Norbert Pfeifer (TU Wien), Mr. Jáchym Čepický (OSGeo), Mr. Martin Landa (Czech OSGeo and GRASS Project, Czech Technical University) and Mr. Arnošt Müller (Czech Technical University). The Summer School provided a great opportunity for participants to experience intensive lectures and practical sessions along with the fantastic discovery of the sceneries and local attractions of Telč.

YOUTH FORUM

The Youth Forum was divided into 3 oral sessions and a poster session. A total of 17 papers were presented. The sessions were chaired and co-chaired by the ISPRS SC board members and members of the Working Group VI/5. Leica Geosystems sponsored the awards for the Youth Forum, providing prizes for the Best Youth Forum Paper and Best Youth Forum Presentation. The Best Paper award was given to Xinxin Liu, Huanfeng Shen, Qiangqiang Yuan, Liangpei Zhang and Qing Chen from Wu-

han University, China for their paper entitled, “A novel removal method for dense stripes in remote sensing images.” The Best Presentation was granted to Maarten Bassier, Maarten Vergauwen, Bjorn Van Genechten and Guido Kips of KU Leuven, Ghent, Belgium for their paper on “Standalone terrestrial laser scanning for efficiently capturing AEC buildings for as-built BIM.”

PANEL DISCUSSION

The Panel Discussion was focused on the question, “Industry or Academia – Where do I fit in after graduation?” Invited speakers were Dr Marguerite Madden of the University of Georgia, USA, Dr. Clive Fraser of the University of Melbourne, Australia, Dr. Shunji Murai of the University of Tokyo, Japan, Dr. Kohei Cho, General Secretary of the Asian Association on Remote Sensing (AARS) and Dr. Emmanuel Baltavias of ETH Zurich, Switzerland. The speakers gave insights on what to consider when choosing your career, possibilities and sacrifices in deciding which path to take after graduation. The discussion also talked about how finances and service to others influence our lifelong decisions, either as an industry professional or an academician/researcher.

GENERAL ASSEMBLY

Lastly, the General Assembly gathered the members of the ISPRS SC present in the Congress. The ISPRS SC board members presented a summary of the achievements of the organization for the past 4 years and provided brief introductions for the nominations to the incoming term. The new board members elected were Sheryl Rose Reyes (United Nations University, Japan) for Chair, Jacky Chow (University of Calgary, Canada) for Co-Chair/Secretary, Angelica Kristina Monzon (University of Cambridge, United Kingdom) for Newsletter Editor-in-Chief, Angela Rodrigues (Wetfälische Wilhems University of Münster, Germany) for Web Administrator, Mustafa Ustuner (Yildiz Technical University, Turkey) for Social ... *(continue on next page)*



Photos (Clockwise): Panel discussion, Telč Summer School participants, Report of the ISPRS SC board members during the General Assembly, Panel discussion and General Assembly audience, The ISPRS SC board member during their poster presentation in the Prague Congress, Panel discussion audience.

... Media Coordinator, and Charles Jjuuko (Makerere University, Uganda) for board member.

Aside from these sessions within the ISPRS Congress programme, a Young Scientists Ice Breaker party was also organized and an outdoor soccer match to foster friendship and camaraderie among the youth and to get to know other individuals involved in remote sensing, photogrammetry and spatial information sciences coming from all across the globe.

The ISPRS Congress 2016 was another great event to meet old friends, colleagues and new people working in the same disciplines and to envision a future of collaboration. There is a hope that the ISPRS Congress 2020 in Nice, France will be as engaging and exciting for students as this recent congress - and we are looking forward to see you there again!

Compiled by:
Angelica MONZON
Charles JJUUKO

The TEAM Behind the ISPRS Student Consortium

Let's take a moment to know the group of individuals who are energetically working behind the scenes of the ISPRS-SC!



Sheryl Rose Reyes
Chairperson

PhD Student, Sustainability Science
Institute for the Advance Study of Sustainability
United Nations University (Japan)



Jacky C. K. Chow
Co-Chair / Secretary

BSc, PhD
Aston University (United Kingdom) and
Leica Geosystems (Canada)

What is your main field of work or research interest?

Radar Remote Sensing, conservation geomatics, natural capital, climate change

What motivated you to become part of the ISPRS Student Consortium board?

I believe in what the ISPRS SC stands for – the younger generation is our future. I also have passion of sharing knowledge and working with people for the main goal of advancing our profession through education and outreach.

To the members of the ISPRS-Student Consortium:

I hope that we continue to work together and I look forward to getting more members involved in the activities of the organization. Please support us in our future endeavors and see you in our events!

What is your main field of work or research interest?

Close-range photogrammetry, sensor fusion, SLAM, robotics, and machine learning.

What motivated you to become part of the ISPRS Student Consortium board?

The amazingly fun and motivated youngsters I get to work with while promoting imaging science to the world.

To the members of the ISPRS-Student Consortium:

Photogrammetry and Remote Sensing is a relatively small field, and that's precisely what I like about it. Go to a few ISPRS conferences and you already know most of the world renowned professors in our community.

Angela Rodrigues
Web Administrator

MSc Student
WetfälischeWilhems University of Münster, Germany



SPOTLIGHTS



Angelica Kristina Monzon
Newsletter Editor-in-chief

MPhil in Conservation Leadership,
University of Cambridge (United Kingdom);
BS Geodetic Engineering,
University of the Philippines – Diliman (Philippines)

What is your main field of work or research interest?

Remote Sensing and GIS applications for natural resources management and biodiversity conservation, (e.g. Species habitat mapping, Forest biomass mapping using optical and SAR data)

What motivated you to become part of the ISPRS Student Consortium board?

I wanted to take the opportunity to engage students to take active roles in promoting and mainstreaming geospatial technologies to address the needs of society, including biodiversity conservation.

To the members of the ISPRS-Student Consortium:

It's an exciting era of development for our field of photogrammetry and remote sensing. I hope everyone can find ways to optimise the SC as a hub to brew ideas, explore opportunities and expand our networks to always be in the cutting edge of development. I'm looking forward to meeting and engaging with you in future activities of the ISPRS-SC.



Charles Jjuuko
Board Member

Joint Master's degree in Limnology and Wetlands Management
University of Natural Resources and Life Sciences (BOKU), Vienna, Austria.
Egerton University, Njoro, Kenya
UNESCO-IHE, Institute for Water Education, Delft, Netherlands



Mustafa Ustuner
Social Media Coordinator

PhD Student in Geomatics Engineering
Yildiz Technical University
Turkey

What is your main field of work or research interest?

Polarimetric SAR, Image Classification, Machine learning, Agriculture in Remote Sensing

What motivated you to become part of the ISPRS Student Consortium board?

The enthusiasm and energy of the SC members initially encouraged me to become a part of ISPRS SC board. Fostering new relationships and sharing more information will truly strengthen the society.

To the members of the ISPRS-Student Consortium:

Social interactions in both your academic or professional area will provide you more benefits than studying by yourself at your laboratory. More networking means more understanding of what's going on in your field. It will give you more confidence to convey your opinions. SC is the great platform for this purpose. Join us and use this advantage. We need you!

What is your main field of work or research interest?

Wetland hydrological and ecological modeling
Land use/change modeling with Remote Sensing and GIS
River and wetland restoration
Ground water resources inventory and management using GIS

What motivated you to become part of the ISPRS Student Consortium board?

The desire to meet different professional and students in the field of Photogrammetry and Remote Sensing. I also want to represent Africa, help in the ISPRS-SC activities and try to make impacts resonate with the student community in Africa.

To the members of the ISPRS-Student Consortium:

This is a great opportunity to work with such a great team of highly motivated individuals. I wish you the best of luck as we strive to put the ISPRS-SC where it belongs- at the top by helping in achieving its goals.

Report on the 15th ISPRS Student Consortium and Working Group VI/5 Summer School

Sheryl Rose Reyes, ISPRS SC Chair, United Nations University, Japan
S.K. Wijayasinghe, Director, Institute of Surveying and Mapping, Sri Lanka

The 15th ISPRS Student Consortium and Working Group VI/5 Summer School was held at the Institute of Surveying and Mapping (ISM), Diyatalawa, Sri Lanka from October 22-26, 2016. The summer school theme, “Geoinformatics for Disaster Risk Reduction: Application of Drones.” The ISM is the leading mapping and surveying institute of Sri Lanka and is located in the central highlands of the country. This summer school continues the collaboration and cooperation of the ISPRS Student Consortium with the Asian Association on Remote Sensing (AARS), the AARS Student Group (ASG).



A total of forty (40) participants attended the summer school: nine (9) international participants and thirty-one (31) from Sri Lanka. The participants were welcomed by Mr. S.K. Wijayasinghe, Director of ISM and Ms. Sheryl Rose Reyes, who represented the ISPRS Student Consortium. Opening remarks were delivered by Prof. Kohei Cho, General Secretary of the Asian Association on Remote Sensing (AARS) and Dr. Lal Samarakoon, Director, Geo-informatics Centre of the Asian Institute of Technology, Thailand at during the opening ceremony.



Dr. Cho opened the lectures by sharing his personal journey as an international scientist and how participation in international conferences and activities helped him pursue his career. He also gave a lot of insights on how friendships can foster international scientific collaboration. Moreover, he discussed how AARS and ISPRS are sister societies and the present structure of ISPRS.



This summer school consisted of the following intensive lectures:

- *Introduction to Remote Sensing and Data Acquisition (Dr. Kohei Cho, AARS)*
- *Geo-informatics for Disaster Risk Reduction (DRR): Japan Aerospace Exploration Agency (JAXA) case studies and Geo-informatics for Emergency Mapping, International Charter for Space and Major Disasters (IDC) and Sentinel Asia (Dr. Lal Samarakoon, Asian Institute of Technology, Thailand)*
- *Data Integration and Mapping: Commercial and Open Source Tools (Mr. Chathura Hasanka Wickramasinghe, Royal Melbourne Institute of Technology, Australia)*
- *Datum Transformations and Coordinate Systems (Mr. S.D.P.J. Dampegama, Survey Department of Sri Lanka)*
- *Geo-informatics for Disaster Risk Reduction (DRR): A Sri Lankan Experience (Mr. Srimal Samansiri of the Disaster Management Centre, Sri Lanka)*
- *Introduction to Drones and Basic Drones, Introduction to Data Collection using Drones, Session Planning for Data Collection (Mr. S.D.P.J. Dampegama, Survey Department of Sri Lanka)*

The fieldwork included setting up control points using surveying techniques, and a familiarization activity on using drones. The students enjoyed a short trip to Ella, Rawana Falls, Nine Arch Bridges, and the Demodara railway loop.

The final day was spent for practical sessions: downloading data and its processing, preparation of maps using data collected by drones and applications. The program concluded with a farewell dinner with many entertaining activities and performances by participating countries and groups. The participants were served with good Sri Lankan cuisine and a bonfire to celebrate learning and friendships.

During the closing ceremony, certificates of participation were awarded to the participants. This summer school was a great experience for both local and foreign participants, who were able to enjoy the culture of Sri Lanka, as well as the capabilities of the host country in remote sensing.

Intergeo 2016: Sensors, Technologies, and Instruments

Jacky C. K. Chow, ISPRS SC Co-Chair
Leica Geosystems, Canada

Another exciting year for the geospatial industry, Intergeo 2016, one of the largest annual geomatics tradeshows took place in Hamburg, Germany from October 11 – 13, 2016. It covered a wide variety of areas such as big data, smart city, building information modelling and some other great implementations of cutting edge geospatial technology. For students studying photogrammetry, it was an eye-opener and a great networking opportunity (*highly recommended to students if you can convince your supervisor to sponsor you*). I was fortunate enough to be an attendee this year, and I would like to share some highlights with you that might be useful if you are working or studying geomatics engineering and other associated fields.

For those of you reading this article, you are perhaps most interested in imaging instruments, therefore I'll try to focus on the latest imaging systems exhibited in Intergeo 2016:



GeoSLAM: ZEB-REVO, this 3D handheld mobile scanning system that uses a spinning Hokuyo LiDAR and SLAM algorithm got an optional upgrade - it now comes equipped with a GoPro camera known as the ZEB-CAM.



Trimble: Is it a terrestrial laser scanner? Or is it a total station? How about both? **The Trimble SX10** combines the functionalities of a total station and laser scanner into a single instrument.

Hexagon Geosystems: Leica Geosystems and DJI are now partnering up to deliver drones for geomatics applications.



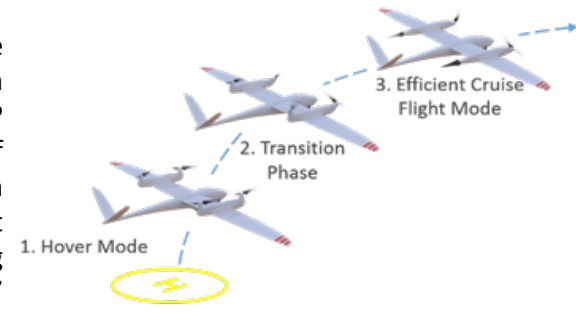
Z+F (left image): The smallest terrestrial laser scanner designed by the company the Imager 5016 is only 26 cm wide and 33 cm tall. It even has a built-in flash when capturing full HDR panoramas.

Teledyne Optech (right image): The Maverick is a portable mobile mapping system (LiDAR + GNSS + INS) that can be mounted on a backpack, Segway, or the roof of a vehicle.



FARO: Focus S is an improved terrestrial laser scanner with better accuracy(1 mm range accuracy) and the ability to detect when a calibration is necessary. With built-in GNSS, compass, tilt-sensors, camera, and barometer, this is more than just your regular LiDAR system.

Quantum Systems: Cannot decide between a fixed wing aircraft and a quadcopter as your UAV platform? How about a drone that can take-off and land like a quadcopter but then transforms into a fixed wing aircraft in mid-air? They are also partnering up with ESRI to have "Drone2Map" functions for ArcGIS.





Viametris (left image): Their mobile indoor laser scanning system is no longer just on a trolley; find similar technology on a backpack and a handheld platform.

Riegl (right image): not many companies out there have a 1.5 cm level accuracy LiDAR designed for drones. The mini-VUX-1UAV can be mounted on any medium+ sized UAVs.

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For further information of the Intergeo, please visit www.intergeo.de. You can also follow @InsideIntergeoon Twitter. We strongly encourage any student in the field of photogrammetry and remote sensing to attend Intergeoto learn more about the latest geoinformation technologies and trends in the industry.

Report by:
Sheryl Rose REYES

Report on WEBCON6 Asian Conference on Remote Sensing (ACRS) 2016

Sheryl Rose Reyes, ISPRS SC Chair
United Nations University, Japan



The WEBCON, or the Web Contest, was conceptualized by the Asian Association on Remote Sensing (AARS) in order to promote activities for students and young researchers. The primary objective of the contest was to develop innovative web

materials that can provide a future vision of the web related to geo-information sciences. The WEBCON6 was held at Hotel Galadari, Colombo, Sri Lanka on October 19, 2016 as part of the student activities of the 37th Asian Conference on Remote Sensing (ACRS 2016). A total of 17 entries were received from Sri Lanka, China Taipei, Japan and Philippines. During the session, only 14 out of the 17 entries presented and demonstrated their work. The WEBCON6 received the highest number of entries for the past 6 years since the inception of the competition.

The entries showcased various web-based geospatial applications for tourism, health, marine, agriculture and geology, to name a few. The Bronze Awards were granted to 2 teams, for the entries entitled, "Interactive Flood Risk Assessment and Forecasting Web App," submitted by Edsel Matt Morales, Elbert Moyon and Jojene Santillan of Caraga State University (Philippines) and "Interactive Paper

Map" by Ting-Chun Lin and Jhe-Syuan Lai of the National Central University (China Taipei). The Silver Prize was presented to Min-Lung Cheng, Hiroyuki Kawano and Takayuki Shinohara of Tokyo Institute of Technology (Japan) for their entry entitled, "Interactive Paper Map." The Gold Award was presented to "Smart Happy Farm," an entry submitted by Hsin-Hsien

and Hsuan-Chi Ho of National Central University (China Taipei). A special mention, WEBCON Special Citation Award, was granted to the team LRK Kahandagamage, AAA Chinthaka and Gayal Amaranath of the Centre for Research and Development of Sri Lanka for their outstanding presentation of their entry entitled, "Epidemic Survey and Tracking System."



WEBCON continues to attract more and more participants every year in ACRS. With the progress in technology and the Internet, highly creative and state-of-the-art web applications have been received in the past years for the competition and a future of useful and excellent web application related to geo-information sciences can be expected from students and young researchers in the future.



“Interactive Flood Risk Assessment and Forecasting” Web Application

Edsel Matt O. Morales, Elbert S. Moyon and Jojene R. Santillan
 CSU Phil-LiDAR 1 Project, Caraga State University, Butuan City, Philippines

Interactive Flood Risk Assessment and Forecasting web application is one of the initiatives of the Department of Science and Technology (DOST) – funded Phil-LiDAR 1 project being conducted by the Caraga State University (CSU Phil – LiDAR 1) for Caraga Region, Mindanao, Philippines.

Phil – LiDAR 1 projects are being implemented nationwide by fifteen (15) higher education institutions (HEIs) for 3 years since 2014, and its primary aim is to generate flood hazard maps through the use of high spatial resolution Light Detection and Ranging (LiDAR) datasets and other geospatial datasets and techniques. CSU Phil-LiDAR 1 project, in particular, concentrates its implementation in the river basins of Caraga Region.

Interactive Flood Risk Assessment and Forecasting is one of the several web-based application developed by the project. Basically, it aims to:

- Present flood hazard information of a particular locality. These includes the flood water velocity (how fast the flood water can travel toward a certain location), arrival (time the flood water can finally reach a specific location), depth (the deepness of the flood water), duration (how lengthy is the flooding event, in time), and recession (time the flood water totally retreats).
- Display location of nearest and safest possible evacuation shelters. Most common evacuation shelters are schools, gymnasiums and covered courts.



Web interface of the application

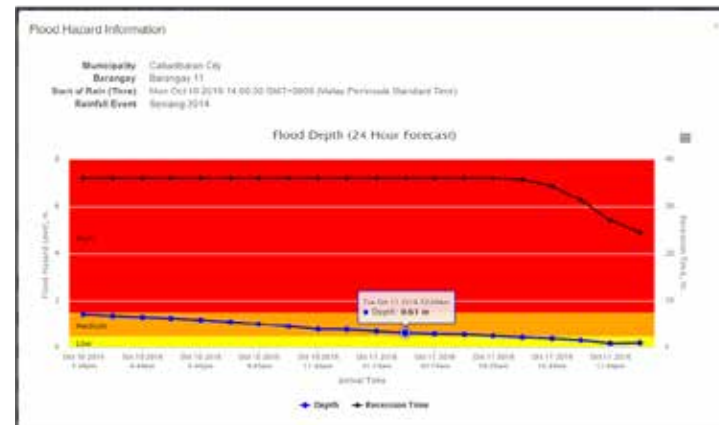
Projecting the flood waters’ behavior in a particular local area is the expected outcome of this application. Using the various rainfall scenario-based flood hazard maps derived through the use of flood model simulation models, flood information (depth, velocity, duration, arrival and recession time) can be anticipated.



A zoomed-in version of the web map showing the nearest evacuation shelters

The application, as a whole, is a combination of several free and open source software. For flood information storage, PostgreSQL and PostGIS Spatial database were utilized. For online visualization, the web platform of the application is a perfect blend of Bootstrap and JavaScript frameworks, to display the flood information. For it to be more interactive, the user has to specify parameters, like municipality, barangay, amount of rainfall or a rainfall event and to draw a polygon or point on the Web map interface, which will serve as the basis in showing flood extent and its related information.

The application was devised as one of many ways to assist the communities and LGU’s of Caraga Region as it could provide visual information that is crucial for making a sound and efficient decision in preventing and alleviating flood threats. With this kind of information, this application may not just be beneficial for the region, but for the country as well.



The Illustration shows the example of 24 hour forecasts Flood Hazard Information

The application, at present, is continuously being improved and tested. The public version will be available as soon as it is ready for deployment.

A TOURISM PLATFORM FOR SEEING YOU IN THE 2020 SUMMER OLYMPICS

Min-Lung Cheng, Hiroyuki Kawano, Takayuki Shinohara
Tokyo Institute of Technology, Japan

Based on the popularization of handsets and smart phones in recent years, travelers and tourists regard them as one of the indispensable instruments. With the functionality to share the life with friends, social networking service applications such as Facebook and Instagram are welcome around the world. However, it is hard to recall the memory about the tourism spots after a period of time of each journey. “How can I recall the memory?” or “Oh, I forgot where I had visited.” happen quite often in our lives.

Don't worry! It is not a problem. If there were photos of the places you visited (“hot spots”), we are able to assist you to recall the memory of your trip. A system

is designed to detect the location of a photo and respond to the users via social network service “Twitter.” As you upload a photo, the system will search the hot spot information for you. Of course, real time photo sharing is also possible in this designed system. To welcome all of you to visit Tokyo in 2020 for the Olympic Games and share your trip here, this application is set to be easy and enjoyable for all users. Just upload your photos and push the button, it is possible to let your family and friends to take a virtual journey in Tokyo. What are you waiting for? Join our social network and come to Tokyo, an enjoyable exploration awaits!

EPIDEMIC SURVEY AND TRACKING SYSTEM

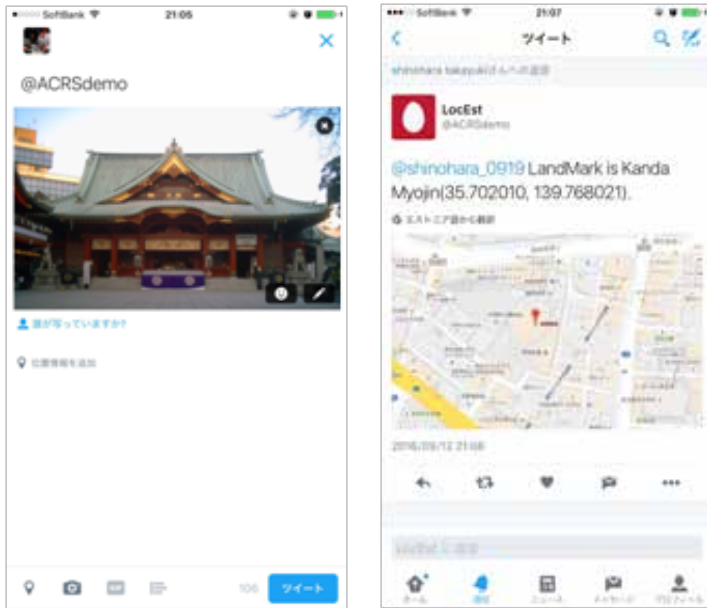
Min-Lung Cheng, Hiroyuki Kawano, Takayuki Shinohara LRK Kahandagamage, AAA Chinthaka, Gayal Amaranath
Centre for Research and Development, Sri Lanka

The lack of planning, inadequate housing, water, sewage, and waste management has created ideal conditions for dengue viruses. In 2012, dengue is the most important vector-borne viral disease of humans and likely more important than malaria globally in terms of morbidity and economic impact. The latest studies estimate in Sri Lanka around 5 million people living in areas of risk, over 32,000 infections so far in this year, and 50 deaths. Thus, ignored for many years, only recently has the potential magnitude of the dengue problem been acknowledged by policy makers and funding agencies. The government of Sri Lanka has spent millions to develop dengue reporting, analysis and prediction systems, thus never been able to reduce the impact of the dengue due to burden of practical applicability and lack of community participation. With months of literature survey and interviews with related personal and authorities, the ministry of defence (CRD) has developed a participatory Web-Mobile and GIS based system to address the burden of dengue in Sri Lanka. This system is enriched with the latest technologies in mobile applica-

tions such as the Web and Geographic Information Systems. This system is capable to monitor trends in the distribution and spread of dengue geographically over time. This enables early response and reporting of dengue breeding locations and patient's locations with various related data using mobile applications, automated alerting system for PHIs and related authorities based on community mapping.

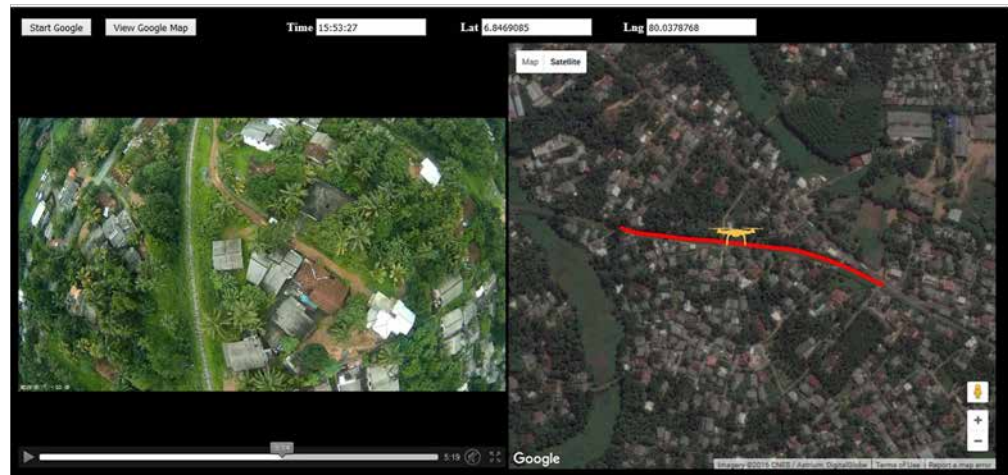
Drone mapping is used to map dengue risk areas. Water logged places, malfunctioning drainage systems, garbage dumps, and/or any potential endemic area will be marked as risk areas with the use of aerial photos and videos. Live monitoring of the dengue risk areas using drone is a vital factor hence this system get the live streams from the high flying drones in-order to monitor present condition of the risk areas. Hotspot analysis and various statistics reports enhance the risks of individual's surroundings.

“... a participatory Web-Mobile and GIS based system to address the burden of dengue in Sri Lanka.. This system is capable to monitor trends in the distribution and spread of dengue geographically over time. This enables early response and reporting of dengue breeding locations and patient’s locations..”
 - WEBCON6 Special Citation Award from the Centre for Research and Development of Sri Lanka



Images (Left to right) : Methodology, mobile application interface and SMS alert sample of the “Epidemic survey and tracking system” (Sri Lanka)

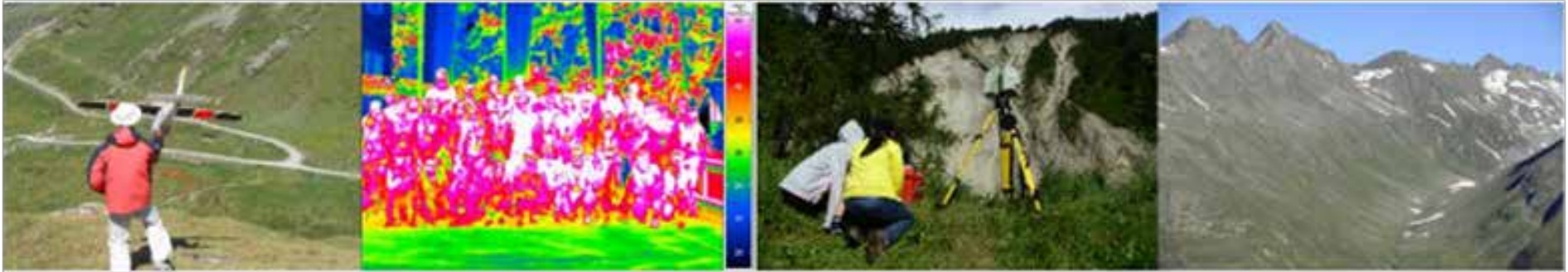
“As you upload a photo, the system will search the hot spot information for you.. To welcome all of you to visit Tokyo in 2020 for the Olympic Games and share your trip here, this application is set to be easy and enjoyable for all users.”
 - WEBCON6 Silver prize winners from the Tokyo Institute of Technology (Japan)



Drone mapping used to map dengue risk areas

ISPRS Innsbruck Summer School of Alpine Research 2017: Close Range Sensing Techniques in Alpine Terrain

Roderik Lindenbergh and Martin Rutzinger



Mountain regions around the world and the European Alps in particular are subject to many different dynamic processes. Examples are landslides and rockfall, avalanches and glacial retreat, changes in permafrost coverage and vegetation adaptation to climate change. Some of these processes may directly affect human lives, like landslides, while others may give a clear indication of the impact of predicted climate change. The ISPRS Innsbruck Summer School aims at bringing together two groups of young researchers: one that is notably interested in the processes, and one that is specialized in a scala of different close- and near-range monitoring techniques. Practical lectures on data processing techniques are alternated by keynote presentations on what defines a tree line for example.

Processes and processing also come together in the assignments: Groups of about seven participants will work together on a task that comes with an instrument. For example, in the first edition of 2015, one student group mapped a landslide area with a terrestrial laser scanner, processed the data and presented the results. This year's Summer School will again take place in Obergurgl, at nearly 2000 m the highest village in Austria, with direct access to nice alpine meadows and beautiful lakes, but also at hiking distance of ice and rock glaciers. In 2015 we experienced that the combination of 40 keen young researchers, 15 enthusiastic senior researchers, a number of UAVs, laser scanners and thermal cameras and a strategically located alpine village are the perfect ingredients for a very interesting summer week. The

two references below point to a full report of the previous edition and a paper written based on one of the previous assignments. Up to date information on this years event can be found on the Summer School website:

<https://www.uibk.ac.at/geographie/summerschool/>

We plan to make this Summer School a bi-annual tradition. Part of these plans is to work closely together with the ISPRS Student Consortium to ensure that the Summer School will keep offering a program to future ISPRS students that helps them to strengthen their research and to make international friends in an inspiring and challenging environment.

References

1. *Close-range sensing techniques in alpine terrain*, (2016), M. Rutzinger, B. Hoefle, R. Lindenbergh, S. Oude Elberink, F. Pirotti, R. Sailer, M. Scaioni, J. Stoetter and D. Wujanz, *ISPRS Annals*, III-6, pp. 15-22.
2. *Deriving 3D Point Clouds from Terrestrial Photographs-Comparison of Different Sensors and Software*, (2016), Niederheiser, R., Mokros, M., Lange, J., Petschko, H., Prasicek, G. and Oude Elberink, S., *ISPRS Archives*, 41, pp. 685 - 692.

The ISPRS Geospatial week 2017.
Wuhan China, 18-22 September 2017

For more information visit:
<http://gsw2017.3snews.net/>

The 37th International Symposium on Remote Sensing of the Environment.

Tshwane, South Africa, 8-12 May 2017
For more information visit: <http://isrse37.org/>

International Conference on Unmanned Aerial Vehicles in Geomatics.

Bonn Germany, 04-07 September 2017
For more information visit:
<http://uavg17.ipb.uni-bonn.de/>

26th International CIPA Symposium: Digital Workflows for Heritage Conservation.

Ottawa Canada, 28 August-01 September
For more information visit:
<http://www.cipaottawa.org/>

International Conference on Urban Geoinformatics 2017. New Delhi, India. 22-23 February, 2017

For more information visit:
<http://www.icug.teriuniversity.ac.in/>

1st International Symposium on Applied Geomatics and Geospatial solutions.

Rosario-SantaFe, Argentina. 03-07 April, 2017
For more information visit:
<http://www.geodata2017.com.ar/index.php/en/>

Joint Remote Sensing Event: URBAN 2017 and URS 2017. Dubai, UAE. 05 March 2017.

For more information visit: <http://jurse2017.com/>

10th International Symposium on Mobile Mapping Technology and Summer School on Mobile Mapping. Cairo, Egypt. 06-08 May 2017. For more information visit: <http://mmt2017.aast.edu/>

PhD Opportunities

International Climate Protection Fellowship for young climate experts from developing countries

The fellowship is offered in Germany by the Federal Ministry of Environment. For more details follow the link below;
<https://www.humboldt-foundation.de/web/icf.html>.

The Mitsumae International Foundation Research Fellowship program 2018

The fellowship is hosted at selected Japanese institutions. Application details can be found on the website;
<http://www.mif-japan.org/fellowship/announcement/?hl=en>.

Victoria Doctoral Scholarships for New Zealand and International Students, 2017-2018

Scholarship is tenable at the University of Wellington, New Zealand for a period of three years. Details for the scholarship can be got from the scholarship website;
<http://www.victoria.ac.nz/study/student-finance/scholarships/find-scholarship/scholarship-detail?detailCode=100008>.

Masters Scholarship Opportunities

Scholarships at ITC in Netherlands

ITC offers and 18 months master programme; Geoinformation Science and Earth Observation which is eligible to many scholarship programmes. Details on the scholarships can be got by following the link below.

https://www.itc.nl/NFP-MENA-scholarship-programme?utm_campaign=touch&utm_source=scholarships2017&utm_medium=email

Shanghai Government scholarship 2017 in China

The scholarship is offered by the Shanghai government in China for students taking masters or doctoral programs. More information on the scholarship can be found on their website:
<http://www.apply.shu.edu.cn/sys/web/Scholarships.asp>.

Commonwealth shared Scholarship 2017

Applications are now open for the above scholarship and details can be got by following the link below;
<http://cscuk.dfid.gov.uk/apply/shared-scholarships/info-candidates/>.

VLIR-UOS Master Degree Scholarships for Developing Countries in Belgium, 2017

The scholarships are offered for various masters and training course notably, Master of Science in Marine and Lacustrine Science and Management (Oceans and Lakes), Master of Rural Development. More details can be found on the scholarship website;
<http://www.vliuos.be/scholarships>.

Job Opportunities

2017 esri User Conference Student Assistantship

Applications can be submitted until 7th April 2017. For more information visit: <http://www.esri.com/careers/main/job-detail?jobID=6098&term=Short%20Term&jobtype=Assistantship&location=Redlands,%20CA&capath=&loc=&jsearch=>.

Cartographer needed at ESRI

For more information about application visit: <http://www.esri.com/careers/main/job-detail?jobID=5989&term=Full%20Time&jobtype=ArcGIS%20Product%20Engineering&location=Redlands,%20CA&capath=&loc=&jsearch=>.

Please visit our SC web page www.isprs-sc.org where you will find more information about Student Consortium, our previous Newsletter issues, SC activities, photo galleries from previous Summer Schools, interesting links etc.

Our previous Newsletter issues

