

ISPRS WG VI/5 and Student Consortium Summer School

Theory and Application of Laser Scanning – july 1-6, 2007

Objective:

This summer school is a joint initiative of the ISPRS Student Consortium. The lecturers will come from acknowledged international research and education institutions, making this summer school a truly professional experience. Tutorials in form of lectures will be combined with a lot of practical exercises theory will be demonstrated with variety of applications. A special module on scientific and research approach will be included in the program. All teaching material will be provided on digital media. In order to stimulate active participation of students and young researchers, call for young author papers on presenting their research results will be announced. The authors of the selected papers will have opportunity to present their work in a special session.

Contents:

The technology of laser scanning is inevitably entering the everyday surveying practice. On the other hand, the faculty programs are not always able to follow the quick development of the profession, due to expensive equipment, data, specialized knowledge and teaching materials. This summer school is thus meant to upgrade and deepen the general knowledge in the technology, students may receive at their faculties, and to practice the theory on real data. Although there are quite many workshops recently organized in this topic, this summer school will be adapted to the targeted audience – students and young researchers.

Both, aerial and terrestrial laser scanning will be presented: principles of technology, data filtering and classification methods, registration and georeferencing, different applications (DTM generation, building and object reconstruction, forest applications, architectural applications, etc.). Details of the program will be subsequently given in the 2nd announcement on these web pages.

Intended audience:

This Summer School is designed for well-motivated, advanced graduate and post-graduate students, as well as young researchers, thus it will be didactically adapted.

Location:

Ljubljana, Slovenia, Faculty of Civil and Geodetic Engineering, University of Ljubljana

Lecturers:

AKCA, Devrim (1975) was born in Mersin, Turkey. He received his both B.Sc. and M.Sc. degrees at the Department of Geodesy and Photogrammetry Engineering, Karadeniz Technical University, in Trabzon, Turkey in 1997 and 2000, respectively, and his Ph.D. degree in Photogrammetry, Swiss Federal Institute of Technology (ETH) Zurich, Switzerland in 2007. He is currently research associate at the Institute of Geodesy and Photogrammetry (IGP), ETH Zurich.

BILBAN, **Gregor** (1975) was born in Kranj, Slovenia. He received his B.Sc. degree in Electrical Engineering with thesis »Global Positioning System«. Since 1999 he works for the company Geoservis, a Leica Geosystems authorized distributor and service workshop, as a technical support. He took part in establishing the first Slovenian permanent reference station which was included in EUREF Permanent Network and also in establishing the first Slovenian GNSS station. He gained experience in TLS on various Technical trainings at Leica Geosystems and on different laser scanning projects in Slovenia. At the company Geoservis he is also responsible for ISO 9001 certification. He is currently attending M.SC. geodesy study at the Faculty of Civil Engineering and Geodesy in Ljubljana.

FRIESS, Peter (1960) was born in Dieburg, Germany. He received his M. Eng. degree in Geodesy in 1984 from Darmstadt University. In1985 he joined the Institute of Photogrammetry at Stuttgart University and participated in the research project "High Precision Navigation" under the direction of Prof. Dr. Ackermann. In 1990 he was awarded the Ph.D. with honors by Stuttgart University for the thesis "Kinematic Positioning for Aerial Triangulation with the NAVSTAR Global Positioning System". He worked at INPHO GmbH Stuttgart on the development of GPS processing software until he co-founded TopScan GmbH in 1992. For 10 years he has been Managing Director of TopScan. In 2002 he accepted the position of Director for Geodetic Applications R&D at Optech International in the US. In 2006 he returned to Germany and is since then active as an independent consultant for Optech International. Peter Friess received the Award of the Society of Friends of the University of Stuttgart (1990), the Hansa Luftbild Award (1991) and the Carl Pulfrich Award by Carl Zeiss Oberkochen (1997).

LEMAIRE, Charles, INPHO GmbH

PFEIFER, Norbert (1971) was born in Vienna, Austria. After his studies of surveying engineering he worked as research assistant studying airborne laser scanning from 1997 at the Vienna University of Technology. He earned his Ph.D. (with honours) in 3D terrain modelling combining approaches from computational geometry and photogrammetry. Thereafter, 2003, he went as PostDoc to Delft University of Technology, the Netherlands, in the Section of Photogrammetry and Remote Sensing where he became Assistant Professor in 2005. The research field widened to terrestrial laser scanning. In 2006 he took the position of senior researcher at alpS, Centre for Natural Hazard Management, in Innsbruck, Austria, where he lead a project on airborne and terrestrial laser data management and modelling with specific attention given to modelling alpine natural hazards. Later in 2006 Norbert Pfeifer took the position of Professor in Photogrammetry at Vienna University of Technology. He is an active member of the ISPRS, International Society of Photogrammetry, Remote Sensing and Spatial Information Sciences, where he is co-chair of the working group V/3 on Terrestrial Laser Scanning. The research interests are topographic and 3d modelling, laser ranging and scanning, and photogrammetry, covering all aspects from data acquisition to modelling to application.

STRAUB, Christoph, Albert-Ludwigs University Freiburge, Department of Remote Sensing and Landscape Information Systems, Germany

STUDNICKA, Nikolaus (1965) was born in Mistelbach, Austria. He graduated at the Technical University Vienna, Austria and since 1994 he hold a degree in communications and radio-frequency engineering. In the 1995-1999 period, he was working at RIEGL Laser Measurement Systems GmbH, Sales and Marketing. After two years of working at LORO GmbH he joined RIEGL Laser Measurement Systems GmbH as Manager, International Sales. His most significant publications are related to laser scanning, terrestrial and airborne laser scanning, cultural heritage documentation by combining near-range photogrammetry and terrestrial laser scanning, laser scanning and photogrammetry for archaeological fieldwork, integrated hybrid sensor based on photogrammetry and laser scanning for architectural representation etc.

VOSSELMAN, George (1963) was born in Ommen, the Netherlands. He graduated with honours from the Delft University of Technology, the Netherlands, in Geodetic Engineering in 1986 with an M.Sc.-thesis on the precision of digital camera's. After his graduation he worked as researcher at the Institute of Photogrammetry of the Stuttgart University, Germany, until 1992. In 1991 he obtained his Ph.D.-degree with honours from the Rheinische Friedrich Wilhelms University of Bonn, Germany, on the topic of relational matching. After a year as visiting scientist at the University of Washington, Seattle, U.S.A., he was appointed professor of Photogrammetry and Remote Sensing at the Delft University of Technology in 1993. In 2004 he joined ITC as professor of Geo-Information Extraction with Sensor Systems. George Vosselman is recipient of the Hansa Luftbild Award (1993) and the ISPRS Otto von Gruber Award (2000). As of 2005 he is Editor-in-Chief of the ISPRS Journal of Photogrammetry and Remote Sensing. Over the years George Vosselman taught many courses in photogrammetry, remote sensing and laser altimetry, both at undergraduate and graduate level. He gave guest lectures, tutorials and courses at universities and conferences in Austria, Bangladesh, Belgium, Finland, Germany, Italy, Saudi-Arabia, Turkey, and U.S.A.. He has been supervisor of about 40 MSc students. From 1999 till 2002 he was programme director for the study in Geodetic Engineering at the Delft University of Technology. He is author/editor of chapter 6 of the ASPRS Manual of Photogrammetry (5th edition).

WANG, Yunsheng, Albert-Ludwigs University Freiburge, Department of Remote Sensing and Landscape Information Systems, Germany