Profile of New Sustaining Members

Research Systems International UK Limited (RSI)

RSI is a provider of complete high-performance data visualisation and analysis solutions including software, consulting and training that turn complex data into useful information.

A Brief History
David Stern founded RSI as Research Systems, Inc. in 1977. IDL software was the company’s first product, and it soon became the leading language and development environment for processing and visualising large, complex data. For the first time, scientists and researchers didn’t have to rely on professional programmers—they could write their own algorithms to quickly analyse and display data. The result: less time spent on programming, and more time available for research and discovery.

In 1994, RSI added ENVI software to its product line. ENVI software’s powerful image processing capabilities and advanced, easy-to-use spectral tools have helped it become a leading, award-winning software solution for the remote sensing industry. Scientists in fields as varied as agriculture, biotechnology, oil and gas, forestry, and the military use ENVI to quickly turn data gathered from a variety of satellite and airborne instruments into useful, visual information.

Where We Are Today
Today, RSI’s customers span the globe, creating innovation in more than 80 countries. More than 150,000 scientists and engineers continue to rely on RSI solutions and services to solve problems, make discoveries, and advance knowledge in industries such as medical, engineering, earth sciences, remote sensing, aerospace, oil and gas, manufacturing, and more.

Remote Sensing and GIS Solutions
Research Systems provides software, training and consulting for the rapidly expanding global remote sensing community. Our ENVI software combines a complete image processing package with the most advanced yet easy-to-use spectral tools. ENVI also provides geometric correction, terrain analysis, radar analysis, raster and vector GIS capabilities, extensive support for images from a wide variety of sources, and much more. Please see the following url for more information: www.rsinc.com/envi.

Technical University of Istanbul

The Division of Photogrammetry at the Technical University of Istanbul was founded in 1969 in the new established Department of Geodesy of Photogrammetry. This division is specialised on Photogrammetry, Remote Sensing, GIS and Deformation Measurements using geodetic and photogrammetric techniques. After its foundation there were many research and development projects on Architectural and Archeological Photogrammetry. In recent years photogrammetric worth noting are projects on:

- Archaeological Site Hattusas in collaboration with the German Archeological Institute
- Obtaining the Old City Silhouette of Istanbul for the Municipality of Istanbul
- Obtaining Façade and Interior Room Plans of the Old Ottoman Palaces like Dolmabahce and Kücüksu for the Turkish Parliament
- An Integrated System of Photogrammetry and GIS for the Acquisition, Documentation and Analysis of Earthquake Damages (especially for endangered historical monuments) sponsored by Volkswagen Foundation, in Collaboration with Univ. of Stuttgart and ETH-Zurich
- Construction of a Building Information System for Some Byzantine Churches in Istanbul with University of Darmstadt
- Establishment of A Research Centre For Protection and Revitalisation of Historical Environment of The Istanbul Historical Peninsula’s in collaboration with Municipality of Fatih and Tech. Univ. Berlin
- Establishment of the 3D Visualisation Data by means of Aerial Photogrammetry for the Ancient City of Ephesus in Collaboration with Tech. Univ. of Vienna and Austrian Archeological Institute
- Photogrammetric Record of the Dome of a World Cultural Heritage Monument ‘HAGIA SOPHIA’, in Collaboration with Tech. Univ. of Vienna
- Monitoring Land–Use Change of the City of Greater Istanbul, an EU sponsored - MOLAND Project with CGS-Germany

There are also many ongoing joint research projects or PhD thesis in the division concerning: Numerical and Digital Photogrammetry; Image Matching Applications; Online data collection and processing techniques; GIS and WEB-GIS applications; Use of Remote Sensing
DigitalGlobe, PCI Geomatics and CCRS Announce First Support of Quickbird Rigorous Sensor Model

After several months of co-operative development and testing, DigitalGlobe, PCI Geomatics and the Canada Centre for Remote Sensing (CCRS, Natural Resources Canada), are pleased to announce support of the QuickBird Rigorous Sensor Model within PCI Geomatics software. This is the first commercial software support of the QuickBird Rigorous Model, developed by Dr. Thierry Toutin at CCRS, which allows the orthorectification of QuickBird Basic Imagery Products with the highest degree of accuracy.

PCI Geomatics announced its support of the QuickBird Rational Polynomial Coefficient (RPC) model earlier this year. The introduction of the QuickBird Rigorous Sensor Model offers PCI Geomatics users a more robust and consistently accurate solution.

"The development that PCI Geomatics has invested in our high-resolution solutions places us far ahead of industry standards," noted Ian Suttie, COO for PCI Geomatics. "We are clearly surpassing user expectations with products such as Geomatica and our customisation services. Teaming up with the dedicated people of CCRS and DigitalGlobe helps keep the high productivity geomatics solutions we create within customer budgets."

"PCI's implementation of the QuickBird Rigorous Sensor Model offers customers the flexibility of orthorectifying QuickBird Basic Imagery to a much higher accuracy than currently available through the standard RPC solution," said Matt Wood, product manager for the QuickBird Imagery Products. "This is the first time the high-resolution satellite imaging industry has provided true orthorectification capabilities to customers through a third-party software product."

"CCRS and PCI set out to simply produce a better, more accurate and less restrictive model for DigitalGlobe's QuickBird satellite, with fewer limitations to criteria such as terrain and slope, among others," observed Dr. Thierry Toutin, principal research scientist at CCRS and designer of the QuickBird model. "As the QuickBird satellite becomes more popular and users begin to fully appreciate its strengths, they will also become more aware of the limitations of the RPC model, and will immediately recognise the value of the QuickBird Rigorous Sensor Model." Dr. Toutin is well known within the geomatics industry for his algorithm model accomplishments and has co-operated with PCI Geomatics on several occasions.

"DigitalGlobe's open systems approach allows our customers to have complete control over their imagery project, while still providing off-the-shelf solutions for those customers who want DigitalGlobe to do the work for them," added Henry Dubois, COO and CFO of DigitalGlobe. "Many of our customers have been anxiously awaiting the first implementation of the QuickBird Rigorous Sensor Model. Our partnership with PCI ensures that our imagery is truly compatible with their software.

www.digitalglobe.com
(Source: DigitalGlobe)
Unsurpassed in detail, QuickBird imagery products have a resolution of 60 centimetres, making them the highest resolution, commercial satellite imagery in the world. DigitalGlobe's customers use these images for numerous commercial applications, including Geographic Information Systems (GIS), planning and mapping, agricultural monitoring, natural disaster evaluations, environmental assessments and forestry mapping, among others.

"The one-year anniversary of the QuickBird satellite launch is the result of a lot of people's hard work. We are so proud to have hit this milestone and anticipate the celebrations of many more anniversaries in the coming years," said Herb Satterlee, CEO and chairman of DigitalGlobe. Images are available for download in a gallery on DigitalGlobe's Web site: www.digitalglobe.com/gallery/anniversary/. Any images used by print, electronic or broadcast media must be attributed to DigitalGlobe.

www.digitalglobe.com
(Source: DigitalGlobe)

RSI Celebrates 25 Years with Release of New Imaging Products

Eastman Kodak Company’s Research Systems, Inc. (RSI) is celebrating 25 years of excellence with the release of several new products. RSI provides robust software solutions for quickly visualising and analysing complex data and images used by scientists, engineers and medical professionals.

RSI’s benchmark products include IDL software, a programming language for data analysis, visualisation, and cross-platform application development; and ENVI software for the analysis and visualisation of remote sensing data. New products being released in commemoration of RSI’s 25th anniversary include the IDL Student Edition and Watsyn, a medical imaging software package for medical application development and deployment.

"For many years after RSI was founded, our product was mainly used by the research and scientific community. Today, our user base has expanded well into the commercial marketplace because the applications for our technology are so diverse," said Richard Cooke, RSI’s President and CEO. "As imaging applications and information technology continue to converge in the infoimaging market, more of our customers are using our products for 3D displays, real-time data processing and instantaneous analysis of large data sets. Those capabilities address a broad range of needs."

Since its founding in 1977, RSI’s customer base has grown to more than 150,000 users from the research and scientific community, government organisations and commercial markets for medical, remote sensing, defence, exploration, engineering, automotive and aerospace applications. Customers are located in over 80 countries worldwide.

IDL was originally developed by David Stern while at the University of Colorado. Working with a team of scientists interpreting data from the Mariner Mars 7 and 9 space probes, Stern needed a computer language that provided for easier, faster application development, data analysis and visualisation. Stern developed IDL as a software language that allowed scientists to test hypotheses without employing a programmer to write or modify individual applications.

In September 2000, RSI was acquired by Eastman Kodak Company to operate as a wholly owned subsidiary. As part of Kodak’s Commercial and Government Systems business unit, RSI augmented Kodak’s extensive image analysis capabilities by offering image visualisation and analysis tools.

Today, RSI offers software solutions in addition to extensive professional services, including on-site training, consulting and technical support. RSI has over 150 employees and offices in France, Italy and the United Kingdom.

www.rsinc.com
(Source: Research Systems, Inc.)

RSI and NIMA to Collaborate on Technology Integration

Research Systems, Inc. (RSI), a wholly owned subsidiary of Eastman Kodak Company, announced that it has entered into a five-year Co-operative Research and Development Agreement (CRADA) with the National Imagery and Mapping Agency (NIMA).

This CRADA enables NIMA and RSI to jointly develop image exploitation tools for NIMA. These tools may also be available for use in RSI’s ENVI Software, a data analysis and visualisation product that is used by government pro-
professionals, scientists, researchers and engineers. "This agreement allows NIMA to provide valuable insight and input into RSI’s future software development. It also enables RSI to tap into NIMA’s vast experience in imagery analysis and exploitation," said Richard Cooke, President of RSI. "This arrangement sets the stage for RSI and NIMA to develop future technologies and product offerings that NIMA and other U.S. Government agencies can leverage," added Cooke.

Key objectives defined within this CRADA are the evolution of technical requirements for ENVI Software, integration of NIMA software technology into the ENVI Software environment, and on-going ENVI product enhancements aimed at advancing imagery and geospatial information processing for NIMA.

"This initiative with NIMA represents an important milestone for RSI. It allows us to further the development and integration of new imaging infrastructure technologies that we can offer to the broader government community,” said Jim Kelley, Director of RSI’s ENVI and IDL Software business lines. “Our ENVI Software and underlying IDL Software development environment provide an ideal combination for an extensible framework for custom application development and high performance computing required by the NIMA community."

Supporting Kodak’s strategy to make digital imaging easier, ENVI Software is designed as an easy-to-use yet advanced remote sensing image analysis software environment that allows users to integrate imagery and geospatial data with ENVI’s powerful image exploitation tools. ENVI Software is ideally suited for extracting and exploiting information from high-resolution panchromatic, multispectral, hyperspectral, thermal, radar, and other types of digital image data.

www.rsinc.com
(Source: Research Systems Inc.)

Other News

**Doxiadis GeoImaging S.A.**

**New Company from Ex-Space Imaging Europe**

Doxiadis GeoImaging (DGI) in Greece is the company that has emerged from the restructuring of the former Space Imaging Europe (SIE), also located in Greece. Following a final award of the International Arbitration Court resolving a contractual dispute between SIE and Space Imaging (CO, USA), SIE is no longer a Regional Affiliate of Space Imaging and will no longer be selling any Space Imaging related products. However, according to the same award, DGI (ex SIE) retains full ownership and the exclusive distribution, marketing and selling rights for the IKONOS imagery collected while SIE operated as a regional affiliate. Products to be generated from this data are also included under the ruling.

DGI will act as an Application Provider for Eurimage and will distribute QuickBird data in Greece. DGI will operate in full co-operation with Doxiadis Associates, a consulting organisation with activities in more than sixty countries, acting in the field of regional and town planning, engineering and development. The company also plans to expand its activities in aerial photo-graphy in the Balkans. In addition, it will be marketing and selling its archive of high-resolution IKONOS imagery covering approximately 700,000km² across Europe, the Middle East and North Africa. All image products are geometrically corrected to a user defined ellipsoid and map projection.

www.doxiadis-gi.com
(Source: Doxiadis GeoImaging S.A.)

**Correction**

**Correction to ISPRS Highlights for September 2002 [Vol. 7, No. 3, pg. 21]**

Dr. Larry Matthies, supervisor of NASA JPL’s machine vision group, will collaborate with Dr. Rongxing Li of The Ohio State University for the mentioned project, not the entire MER 2003 mission.