Curriculum Vitae Vlatko Roland



## PERSONAL INFORMATION

## Vlatko Roland



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Sex Male | Date of birth 12/09/1970 | Nationality Croatian

#### **POSITION**

## **GIS** Engineer

## WORK EXPERIENCE

#### 2009 - present

#### ICT/GIS Consultant

Prehnit Ltd., Zagreb, http://prehnit.hr/

- Managing Director
- Implementation of ICT strategies and policies
- Digital transformation consultant
- ICT & GIS system architecture design and development of web-based geoinformation systems
- Education, training needs assessment, and capacity building

## Project Manager and Instructor, Institute Ruder Bošković, May 2021 – October 2021

- Development of materials, tools and methodology for Design Thinking, Digital Transformation and New Business Models workshops supporting Innovamare EU Interreg Blue Economy strategic project of developing and establishing an innovation ecosystem model for purposes of monitoring and surveillance sector with a mission-oriented on the sustainability of the Adriatic Sea.
- Organizing, managing, and conducting Design Thinking, Digital Transformation and New Business Models workshops for the stakeholders of the Innovamare project
- Project management and workshops logistics

#### Project Manager, Center for Vehicles of Croatia PLC, March 2021 – May 2021

- <sup>o</sup> Vehicle inspection system optimisation project facilitating reduction of carbon emission
- Data collection, data quality assessment and GIS analysis of optimal vehicle inspection locations for the entire territory of Republic of Croatia to reduce travel distance.
- Customization of road network routing engine

## Project Manager, Faculty of Transport and Traffic Sciences, University of Zagreb, March 2021 April 2021

- Production of GIS database of bus stops and bus routes in Šibensko-kninska County
- Review of existing local transport policies

## • GIS Consultant, Vodoprivreda – Zagorje Ltd., September 2020 – December 2020

- Decision support system project in the field of water management
- Design and development of GIS database according to OGC and INSPIRE standards
- Digital transformation of existing business processes

## - GIS expert, Šibensko-kninska County, August 2020 – February 2021

- Development of risk models and contingency plans in case of pollution incidents in the endangered parts of the sea in the EU Interreg project PEPSEA (Protecting the Enclosed Parts of the Sea in Adriatic from pollution)
- Development of plans and policies to increase the safety of the Programme area from natural and man-made disaster based on new technological solutions and equipment, testing a model at pilot project site – problem definition, threat identification, risk assessment adjusted to features affecting the pollution delimiting and cleaning.

## - Project Manager, City of Valpovo, April 2020 - December 2020

- Green Cadastre GIS project for two protected parks in Croatia
- $\ ^{\scriptscriptstyle \rm D}$  Project management, organisation of aerial photogrammetry and terrestrial LiDAR survey





## GIS Expert, CRUP Ltd – for Bulgarian Ports Infrastructure Company, February 2020 – present

- Lead GIS expert for upgrade of BULRIS (River Information System in the Bulgarian Part of Danube) web-based GIS solution for inland waterway management
- Web GIS application for visualization of the vessel traffic
- Implementation of AIS, RIS, IENC, ECDIS and NtS standards

## - GIS/IT Consultant, Ministry of Environment and Energy, May 2019 - May 2021

- Establishment of an invasive and alien species information system (IAS)
- Production of functional specification document and support in GIS data assessment, analysis, data conversion and quality control
- Support to GIS software development team

## - GIS/IT Consultant, Croatian Chamber of Commerce, October 2018 – December 2018

- Development of a GIS software solution for Bus Line Passenger Transport Information System compliant with the Distance Table and Minimum Timetable Regulations
- Creation and maintenance of routable road network for Republic of Croatia (70.000+ km and 300.000+ road links), georeferencing of 10.000+ bus stops from the public records
- GIS database design, conversion and import of existing data
- GIS consultancy services, workshop organisation

## - GIS Consultant, Public Institution "Natura Histrica", July 2018 - present

- Production of Management Plan for the protected area Pazinski potok and Natura2000 HR2001386 Pazinski potok
- Creating cartographic contributions to the Management Plan
- Workshop organisation and presentation of Management Plan in City of Pazin

## International GIS Consultant, Safege Ltd., May 2018 – June 2019

- Project "Road Asset Management System" for the Ministry of Sea, Transport and Infrastructure
- Analysis of the existing GIS and Asset management system of the Croatian Highways, Highway Rijeka-Zagreb, Croatian Roads and regional roads network
- Evaluating the existing road reference methodology and consulting the client in accordance with the INSPIRE Directive for the specification of data for the transport network - road transport and ISO 55001
- Identification of key system components, production of technical and functional requirements for the future Road Asset Management System in Republic of Croatia
- Drafting of Croatian national Road Asset Management Strategy document

## - GIS Consultant, Croatian Agency for Environment and Nature, December 2017 - May 2018

- Copernicus Local Component Validation Project 2012 (satellite imagery classification)
- Validation of local components for five layers: Urban Atlas (UA) 2012, Urban Atlas 2012 Street Tree Layer (STL), Riparian Zones LCLU 2012 (RZ), Green Linear Elements 2012 (GLE) and Natura2000 LCLU 2012 (N2K)
- Determination of test number of samples for each layer and verification of semantic, geometric, topological and biological accuracy of samples for all layers
- Production of layer metadata in accordance with the guidelines and specifications of the INSPIRE Directive

## • GIS Consultant, Business Park of Ogulin Ltd., October 2017 – October 2018

- Project for the development of the GIS database of the Business Park and Project Survey of the state of the former military quarters "Sveti Petar" in Ogulin
- Development of GIS database of zones, parcels and infrastructure
- Production of photo documentation of objects, GIS database of objects, paths and outdoor lighting
- Production of high resolution digital orthophoto and 3D terrain model

## - Project Manager, Ogulin City, March 2017 - December 2017

- Project Implementation of Ogulin City GIS
- Costumer support for working with e-road application (editing according to the requirements and needs of the City, modifying data presentation on different bases)
- Customizing existing and new spatial data for display in GIS application
- Professional and technical assistance and advisory services related to the introduction of Ogulin City GIS





## Project Manager, Developer and Consultant, Teched Consulting Services Ltd., September 2016 – April 2017

- Establishment and development of the Environmental Information System for Montenegro
- Managing a team of developers for the creation of a Web GIS solution for public interactive webenabled interface displaying environmental indicators and other information, including sustainable waste management

## - GIS Consultant, GISPlan Ltd., July 2016 - December 2016

- CH1 Chobe National Park Management Plan preparation
- Nature resource management in Sub-Saharan Africa with the aspect of data management
- Environmental management including documenting biodiversity and threats, environmental sensitivity analysis including noise pollution mapping, geomorphology and hydrology analysis
- Satellite image classification, producing LC/LU layers
- GIS database creation and management, GIS maps creation using ArcGIS Desktop, 3D modelling

#### Project Manager, Public Institution of Kamenjak, June 2016 – April 2018

- Project Management Plan Production for the Protected Areas and the Ecological Network of Natura 2000 in Medulin Municipality
- Managing project team and project tasks
- Institutional development and capacity building for the effective utilisation of decision support systems for the Public Institution
- GIS data management, GIS database and maps production using QGIS
- Writing the Management Plan and producing all cartographic maps for the Plan

## - GIS Consultant, GISPlan Ltd., April 2016 - December 2018

- Tlokweng Development Plan 2001-2025 preparation
- Preparing spatial development framework and strategies, conducting spatial analysis for water resource development in southern Africa and land cover and terrain modelling
- Transportation network and infrastructure mapping, noise pollution mapping
- Data management, GIS database and GIS maps creation, 3D modelling
- Rural development and land management using socio-economic aspects

## - GIS Consultant, GISPlan Ltd., October 2015 - February 2018

- Dikgatlhong Dam Tourism Master Plan preparation
- GIS database and maps creation using ArcGIS Desktop, geospatial data processing, 3D modelling
- Semi-automatic classification of satellite imagery
- Production of basin flow and hydrology analysis on the Dam, rural development and land management by existing socio-economic aspects
- Creation of curvature, slope, aspect, and land tenure models and maps, transportation and infrastructure maps, noise pollution maps, water resources related data management

## • GIS/IT Consultant and Software Architect, 3B infra Ltd., February 2015 – June 2017

- Development of GIS module of infrastructure management information system
- Processing and systematization of spatial and alphanumeric data of railway infrastructure
- Application development based on databases and data models including the management of spatial data and its properties
- Development of functional and technical specification of the system
- Design of GIS system and GIS database architecture, establishment of complete software solution in accordance with INSPIRE directive and use of OGC services (WMS and WFS)
- Customisation of ArcGIS Desktop software by developing procedures for automated access to ArcSDE database and import-export data
- Processing and systematization of spatial and non-spatial data of railway infrastructure and its visualization through Web GIS application
- Implementation of the Web GIS application for monitoring the current position of trains for Austrian and German railways
- Education of users and administrators
- Web server maintenance (Apache), application server maintenance (PHP)
- Relational database maintenance (MS SQL Server, PostgreSQL)
- Maintenance of GIS application server with support for OGC standards (WMS, WFS)
- Implementation of the system for various clients (rail and tram)





## - GIS/GPS Expert, Croatian Firefighting Association, November 2014 - January 2016

- Development of technical specifications for Fire Prevention Integrated Transport System
- Development of technical specifications for GPS tracking of firefighting vehicles and integration with existing IT infrastructure system
- Participation in regional conferences and technical committees related to forest fire prevention
- Action plan development for terrestrial and aerial video surveillance

#### Project Manager, Institute for Physical Planning, Primorje-Gorski Kotar County, November 2014 – December 2014

Implementation of GIS database and software solution for displaying country economic indicators

## GIS Expert for Habitat Mapping of Croatia, Temi S.r.I. Roma, Agristudio S.r.I. Firenze, Timesis S.r.I. Torino, May 2014 – May 2017

- Development of an informational system for habitat mapping of the Republic of Croatia
- Leading role in data collection, analysis, processing and export of GIS database
- GIS support for habitats photointerpretation using remote sensing technologies, post-processing of classified satellite imagery
- Development of technical field research protocols, GIS data collection and database design
- Customizing the ArcGIS Desktop application for building habitats model acquiring datasets using extensive geospatial data analysis conducted using ModelBuilder
- Development and optimisation of Android mobile application for field data survey for offline work and data collection, maintaining data using GeoServer
- Quality control and conducting topology tests for more than 300.000 polygons covering the area of the Republic of Croatia using ESRI ArcGIS by employing geoprocessing and Python scripting skills
- Design of GIS database architecture and web browser for post-processing analysis of collected data
- Design Photo Rename application in the Java programming language
- Support for the technical part of the fieldwork
- Development of a plan for maintaining the habitat information system

## IT/GIS Expert in preparation of the Waste and Leachate Management Plan for Adriatic Sea Environmental Pollution Project, Safege Croatia, March 2014 – October 2015

- GIS expert in preparation of Strategic Environmental Assessment of the Croatia waste and leachate management plan
- Waste disposal optimization using GIS analysis
- GIS data collection and production of project GIS database
- GIS map production, water resources related data management
- GIS training for the effective utilisation of decision support systems, institutional development and capacity building

## - GIS Project Manager, Public Institution "National Park Krka", March 2014 - December 2014

- Bathymetric survey of Skradinski buk lake, spatial interpolation of data using geostatistical analysis and raster calculations to produce a DEM of the lake
- Production of tourist maps-panels with bathymetric data
- Preparation and LiDAR mapping of Krka National Park, flight plan production and technical specification development
- Production of high resolution orthoimages and DTM (30 cm) of Skradinski buk area

## GIS Consultant for Croatian Waters, King ICT, July 2013 – November 2014

- GIS expert in project of establishing a central reporting system under EU Directives and developing a wastewater management plan
- Evaluation of GIS and IT systems, water resource management
- Data management and collation, GIS database design

## - GIS Project Manager, State Geodetic Administration, July 2013 - November 2013

- Implementation of spatial data management system for Croatian national ortho-imagery database
- Quality control and harmonisation of existing data
- Workflow planning for raster data management and business reengineering processes
- Preparation of technical specification for cyclic aerial surveys
- Customization of ArcGIS software solution for database maintenance





## Project Manager, Croatian Mountain Rescue Service, June 2013 - February 2016

- Project Development of innovative technologies in adventure tourism
- Design, implementation and maintenance of the Web GIS geoportal with cycling and hiking tracks and points of interest – www.AdriaticAdventure.eu

## GIS Consultant, Institute for Physical Planning, Koprivnica-Križevci County, March 2013 – June 2014

Workshop moderator within the Attract SEE project – creating indicators of attractiveness of space

#### - GIS Expert, CRUP Ltd., December 2012 - December 2014

- Lead GIS expert for development and implementation of BULRIS web-based GIS solution in inland waterways
- Web GIS application for visualization of the vessel traffic
- Implementation of RIS, IENC, ECDIS and NtS standards

#### IT/GIS Project Manager, Association of Croatian Cities, September 2011 – December 2011

 Managing team of business intelligence, database experts and developers to deliver BI/GIS solution for mapping and analysing local government administrative unit patterns

## UN GIS Technical Advisor for the Environmental GIS Programme for Nature Protection, UNDP Montenegro, July 2011 – April 2012

- UN technical advisor in charge of GIS support on Croatia-Montenegro cross-border program in adventure tourism
- Identifying participants, preparing and implementing capacity building activities, training needs assessment, natural resources management
- Supporting identification of data requirements to support biodiversity conservation planning
- Collated data formatting to ensure integration into the "geodatabase" of the biodiversity sector of the future NSDI

## UN Technical Advisor for GIS Database Administration, National Statistical Office of Mongolia, May 2010

- Providing technical advisory for establishment of the 2010 GIS census/survey database in Mongolia for UNFPA
- Data integration and dissemination of results through Web GIS application
- $\mbox{\tiny \tiny o}$  Support for development of spatial database infrastructure, production of statistics

## - GIS Expert, MLM Group-Zagreb Ltd., June 2009 - October 2011

- Support in Circular economy project aimed to extract the manganese from the slag and reuse the remaining aggregate for road construction
- $\mbox{\tiny o}$  GIS mapping and database design, production of 3D terrain model of slag landfills
- Development of GIS Desktop application for construction site inspection
- Creation of orthoimages for project area

Business or sector GIS, IT

## 2002 – 2011 Senior GIS Consultant/Training Manager

GISDATA Ltd., Zagreb

## 1997 – 2001 GIS Specialist/Developer

GISDATA Ltd., Zagreb

- Planning, coordinating, and organizing courses for external users and employees of GISDATA, an authorized instructor responsible for ESRI education in the SEE region
- Project management, planning and implementation of IT systems
- Database design, consulting services, development of specifications
- ISO 9001:2000 internal auditor
- Visual Basic and ARC/INFO AML programming, Oracle administration and database design

## • GIS Expert, Serbian Republic Geodetic Authority, April 2010 - May 2011

 Database design and data conversion for Serbian Cadastral system, address model implementation





## Project Manager, Emergency Medical Centre Zagreb, December 2008 – December 2009

- Computer Aided Vehicle Tracking and Dispatching System for Emergency Medical Service Zagreb
- Managing team of 8 experts: software engineers, Oracle DB administrators, GIS specialists
- Development of dispatching software, scheduling software and electronic patient record software
- User needs analysis and production of technical specifications
- Creation of GIS database, GIS map design
- Integration with CTI, RFID and MS Navision ERP

## Senior Consultant and GIS Trainer, Croatian Ministry of Culture, January 2007 – August 2009

- GIS of national parks and protected areas
- Implementation of business solutions for the nature protection system in Croatia (PAMS Protected Area Management System) and environmental management
- Scanning of plans, overlay of cadastre, data collection
- Training needs assessment
- Coordinating topics for GIS training for 100+ personnel at the Ministry of Culture, National Parks and Nature Parks for the effective utilisation of decision support systems

## GIS Trainer and Consultant, Paying Agency for Agriculture, Fisheries and Rural Development, June 2006 – May 2007

- GIS training for the core team of Croatian SAPARD Agency (later Paying Agency for Agriculture, Fisheries and Rural Development)
- Help in preparation of LPIS (Land Parcel Identification System) pilot project (data digitalization, use
  of the orthoimagery, block creation and numbering, overlaying with cadastral information,
  development of methodologies for on-the-spot controls, establishing connection with farmers)
- GIS support in LPIS implementation

## Training Manager, GDI GISDATA Ltd., January 2006 – April 2011

- Head of GISDATA Educational services department, ESRI Training Manager responsible for SEE region
- Coordinating and supervising the work of 6 trainers
- Managing the delivery of training, identifying training and development needs, producing training materials
- GIS trainer (ESRI ArcGIS authorized instructor), TNA

## International Long-term GIS Consultant, State Water Directorates in Bosnia and Herzegovina, January 2006 – December 2007

- Water Information System of Bosnia and Herzegovina EuropeAid/110488/d/SV/BA CARDS project
- UML modelling, development of logical model of surface waters and water structures, production of data dictionary and design of MS SQL Server database
- Development of Web GIS portal for water data dissemination
- Modelling of surface water and water facilities database
- GIS education

## Senior Long-term IT Expert, Croatian Waters/Ministry of Water Management, April 2003 – May 2004

- Water Information System Standardisation and monitoring EuropeAid/116034/C/SV/HR project
- Review of the IT infrastructure, processes and design of the Water Information System
- Systematic analysis and standardization of the information system, assessment, and list of reporting requirements under EIS, EEA and EIONET, harmonization of the system with the EU Water Framework Directive
- Project coordination, consultant for GIS database design and Intranet/Internet information system implementation using ESRI ArcIMS and ArcSDE technology for spatial databases

## Software Project Manager, State Geodetic Administration, January 2002 – June 2003

- Project manager for the creation of a database of permanent geodetic control points and the Central Register of Spatial Units
- Project manager for software support, user's needs assessment, database design, existing data migration
- Managing a team of developers, database experts and personnel for data collection (30+ working months)



- Development of Web solution for database dissemination
- GIS trainer, Albanian Watershed Assessment Project, September 2001
- GIS training for Albanian Directorate of Forests and Pastures, watershed management
- Institutional development and capacity building for the effective utilisation of water and natural resources decision support systems
- Water resources related data management, remote sensing

## Software Project Manager, Koprivnica City, Cadastral office, March 2000 – May 2002

- Implementation of first Croatian GIS cadastre system, scanning and overlay of the cadastral maps, parcel digitalization, topology check, parcel block creation and numbering
- Database design, data conversion, development of applications for cadastral data editing, experience at JAVA Management/Oracle administration
- Managing a team of database developers, database administrators and GIS developers for the digital cadastre project of Koprivnica City (30+ working months)
- Business process assessment, database design, CAD conversion, database replication,

## Database Designer/Developer, City Gas Company, October 1997 – November 1999

- GIS of City Gas Company Zagreb
- <sup>a</sup> Application development for data editing of pipeline network, database administration
- GIS export for linear mapping project
- Defining data exchange protocols with external contractors, CAD data conversion
- Defining data entry formats, conversion and standardization of data, scanning of pipeline plans, overlapping with cadastral parcels
- GIS development for efficient data collection and input

Business or sector GIS, IT

#### **EDUCATION AND TRAINING**

## 2016 Enterprise Geodata Management Associate

ESRI, Redlands, USA

ESRI technical certificate

## 2011 ArcGIS Desktop Developer Associate

ESRI, Redlands, USA

ESRI technical certificate

# 1990 – 1997 Master's Degree in Electrical Engineering, Telecommunications and Informatics

Faculty of Electrical Engineering and Computing, University of Zagreb, Zagreb

Master thesis in GIS, Telecommunications and Informatics

## PERSONAL SKILLS

## Mother tongue(s) Croatian

Other language(s)

UNDERSTANDING **SPEAKING** WRITING Listening Reading Spoken interaction Spoken production C1 C1 C1 C1 C1 CEFR B2 A2 A2 A2 A2 A2 C2 C2 C2 C2 C2

German

English

Serbian (Cyrillic)

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user Common European Framework of Reference for Languages

Master's degree

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#### Communication skills

- Developed analytical, counselling, communication and presentation capabilities (ESRI certificated GIS trainer since 2004, Assistant Lecturer at the University of Rijeka, teaching GIS since 2012)
- Experience in organising and conducting workshops in the fields of Environment protection, GIS and IT, Transport, Spatial planning and Local government

#### Organisational / managerial skills

- Experience and skills in project management, coordination and organization gained in the work environment on international projects funded by World Bank, EU and UN organisations
- Developed precision, accuracy, and neatness in work with focus on details for executing standalone projects and leading the teams

#### Job-related skills

- 20+ years of experience in planning, implementation, management, and development of ICT/GIS projects, policies and strategies.
- Provision of technical assistance to coordination agencies and government bodies in digital transformation processes
- Working experience in SADC region, in spatial planning, tourism, and regional policies projects
- Managing director of private Namibian ICT company and Registered ICT Professional at Botswana Engineering Board
- Knowledge of EU regulations and directives (RIS, INSPIRE, WFD) and experience in harmonisation of data and ICT infrastructure.
- Effective communication and presentation skills
- ESRI Certificated GIS Trainer (taught 1,000+ students in 10+ years), ESRI training manager for South-East Europe 2006-2010 with huge experience in training needs assessment

#### Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user Digital competences - Self-assessment grid

- Excellent knowledge of Geographic Information Systems (20+ years of professional working experience with GIS technology and spatial data),
- Proficiency in ArcGIS ArcInfo, ArcGIS Server, ArcSDE technology and FME Tools
- Certified knowledge of GIS systems by ESRI Desktop Developer Associate Technical Certificate, QGIS, GeoServer including Web-based GIS extensions, PostGIS, desktop GIS software and GIS standards and formats; remote sensing, LiDAR, DEM and orthoimages creation
- Extensive knowledge in IT architecture and system design, database design and administration (MS SQL Server, Oracle); business intelligence, data mapping, and data automation processes
- Experienced software project manager, GIS developer (Python, AML, ArcXML, OpenLayers JS)
- Advanced knowledge of computer work. Skilful handling of Microsoft Office™ tools (Word™, Excel™, PowerPoint™)
- Knowledge of GIT source code versioning tool
- 30 years professional ICT experience on Windows / Unix / Linux operating systems

## Driving licence

В



## ADDITIONAL INFORMATION

#### **Publications**

- Ante Šiljeg, Mirko Barada, Ivan Marić, Vlatko Roland: "The effect of user-defined parameters on DTM accuracy - development of a hybrid model ", Applied Geomatics 2018. 1-16 DOI 10.1007/s12518-018-0243-1
- Vlatko Roland, Ivan Marić, Rina Milošević: "Using GIS technology in firefighting activities", 6th Croatian Firefighting Association Symposium, Biograd, Croatia, 2015
- Vlatko Roland, Tamara Kirin, Hrvoje Novosel: "Using mobile application for the field data collection in the Terrestrial Habitat Mapping project in Croatia", Vision and challenges of protected areas management in Croatia –Krka National Park Symposium, Šibenik, Croatia, 2015
- Vlatko Roland, Ante Šiljeg, Anja Batina: "LiDAR data processing and GIS database creation by ortoSky tools on Skradinski buk study case", Vision and challenges of protected areas management in Croatia – Krka National Park Symposium, Šibenik, Croatia, 2015
- Vlatko Roland: "GPS tracking systems in wildfire fighting", Holistic Seismic and Wildfire risk project conference, Venezia, Italy, 2014
- UpsideDown Protect Spatial Data Protection for the Underground Critical Infrastructures, conferences in Ljubljana, Slovenia and Milano, Italy, 2014
- Vlatko Roland: "Introduction to GIS", Horizon 2020 Work programme "Space" scientific workshop, Zagreb, Croatia, 2014
- Tomislav Pavičić, Damir Medved, Saša Vojvodić, Neven Severinac, Vlatko Roland: "Automated design of telecommunications infrastructure using software tools based on geographic information system (GIS)", MIPRO conference 2014, Opatija, Croatia
- Andrija Antolović, Tomislav Blažević, Vlatko Roland: "Near Real-time Risk Assessment during Spring Flooding in 2013", SDI days 2013 Šibenik, Croatia
- Vlatko Roland, Ante Šiljeg, Denis Radoš: "Using Bump Mapping cartography technique example of Mljet National Park tourist map", 9th Symposium on the Cartography and Geoinformation, Zadar, Croatia 2013
- Ante Šiljeg, Sanja Lozić, Vlatko Roland: "Comparison of interpolation methods used in the production of a digital terrain model", 9th Symposium on the Cartography and Geoinformation, Zadar, Croatia, 2013
- Dragan Divjak, Vlatko Roland: "The role of Civil Society Organizations in NSDI development", SDI Days 2012, Zagreb, Croatia
- Maja Kerovec, Vlatko Roland: "GIS in the Geography curriculum in Croatia", Scientific conference on Geography in the science and education system, Zagreb, Croatia, 2012

## Conferences

- EuroGI members meeting, Brussels, Belgium, 2014
- Copernicus and the Big Geospatial Data Challenge Workshop, Berlin, Germany, 2014
- ESRI Training manager meeting, London, UK, 2009
- ESRI User conference, San Diego, USA, 2007
- ESRI European User conference, Warsaw, Poland, 2005
- OECD conference on local development and governance in CE-SEE, Trento, 2005
- Effective Presentation Skills, Tangens, Ljubljana, 2005.
- Business Intelligence, Puma, Zagreb, 2003
- ESRI User conference, San Diego, USA, 2001



## Memberships

- GIS Institute Croatia, President
- Croatian NSDI Working group for spatial data
- BIOM Association for Biological Research

#### Courses

#### Professional ESRI courses:

- Working with ArcGIS Schematics, ESRI, Ljubljana, 2008
- System Architecture Design, ESRI, Redlands, 2004, 2008
- Introduction to ArcGIS Server, ESRI, Zagreb, 2007
- Learning GIS Using ArcGIS Desktop, ESRI, Redlands, 2007
- Managing a Versioned Geodatabase, ESRI, Zagreb, 2006
- ArcGIS Enterprise Systems: Performance and Scalability, ESRI, Zagreb, 2005
- ArcIMS Administration and Customization, ESRI, Redlands, 2005
- ArcSDE Administration for Oracle, ESRI, Zagreb, 2004
- Introduction to ArcGIS I, ESRI, Redlands, 2004
- Geodatabase Design Concepts, ESRI, Zagreb, 2003
- Building Geodatabases, ESRI, Zagreb, 2003
- Introduction to ArcGIS, ESRI, Munich 1999
- SDE Administration, ESRI, Zagreb 1999

#### Other courses:

- Operating the DJI Phantom unmanned aerial vehicle system, Zagreb, 2018
- PMP Exam Preparation, IBM, Zagreb, 2009
- Foundations of Project Management, IBM, Zagreb, 2008
- ISO 9001:2000 Course for Internal Auditor, Dekaform, Zagreb, 2006
- Effective Presentation training, 2005.
- Planning and Managing a GIS, Roger Tomlinson, Opatija, 2004
- Oracle 8i: Database Administration, Oracle Croatia, Zagreb, 2000

#### Certifications

- ESRI Instructor Authorization Exam:
  - ArcGIS Desktop 1: Getting Started with GIS, ESRI, Redlands, 2010
  - ArcGIS Desktop 2: Tools and Functionality, ESRI, Redlands, 2010
  - ArcGIS Desktop 3: Workflows and Analysis, ESRI, Redlands, 2010
- ESRI Technical Certificates:
  - Enterprise Geodata Management Associate, ESRI, Redlands, 2016
  - ArcGIS Desktop Developer Associate, ESRI, Redlands, 2011
- USAID/Urban Institute Certified Consultant for IT Management at Local Government Reform Project, implemented communication Web portal for Požega-Slavonia County and Kaptol Municipality 2002 – 2006
- Technical certificate for Infralife Asset Management Network model, Asset Register, Maintenance and Repair, GIS module using GeoServer, 2017
- Cambridge First Certificate in English FCE Grade B (CEFR B2)