

PERSONAL INFORMATION

Mikel Berdufi



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WORK EXPERIENCE

01/04/2015–Present

Computer programmer

Atos Italia SPA, ROME (Italy)

-Implementation of an enterprise system for audio/video files transfer for RAI (Radiotelevisione Italiana S.p.A.).

-Developing a Windows Service for MS Dynamics CRM 2013 - BO data integration for TheSpaceCinema.

-COCA COLA Data Sharing File Integration System.

01/07/2013–15/09/2013

Computer programmer

Helius Systems, Tirana (Albania)

-Developing New Software's for National postal service of Albania,

-Maintaining Existing Software Systems of postal service of Albania, developed by Company ,for which I worked to.

EDUCATION AND TRAINING

15/09/2014–13/02/2015

Erasmus + Facultad de Informática

Universidad de Murcia, Murcia (Spain)

- Business Intelligence in Biomedicine.

- Development Technologies for Ubiquitous Systems.

- Semantic Web.

- Sensor technologies for heterogeneous environments.

- Wireless Networks.

01/10/2013–13/04/2016

Master Degree in Computer Science

Università degli Studi di Camerino, Camerino (Italy)

-Advanced topics in business intelligence.

-Complex System Design (Modelling Complex systems, CCS).

-Theory of Complexity (Turing machines).

-Innovation & New Technologies (Open Data, Big Data using Hadoop, Web 2.0...).

-Reactive Systems Modelling Specification and Verification (CCS, TCCS, Timed automata, UPPAALtool)

-Business Plan Intelligence (Corporate Finance)

-Distributed Calculus & Coordination (Multiagent Systems, Project about simulating immune system of human body)

- 03/10/2010–15/07/2013 **Bachelor degree in Information and Communication Technology**
 University of Tirana, Tirana (Albania)
 -Programming in c, c++, .Net (C#, ASP.NET).
 -Database Management & Programming (Sql Server 2008 r2, Oracle 11g, PL/SQL).
 -Graphs and Algorithms.
 -System Administration (Active Directory - windows Server 2008).
 -Computer networks (the way computers communicate on the Network, devices used to send and receive data)
 -Internet Systems (Basic data mining algorithms, Oracle Rac, Cloud computing, Sql server replication, sql server 2012 availability groups).
- 15/02/2016–19/02/2016 **Microsoft certificate of achievement**
 Personal Computing Studio Srl, Rome (Italy)
 MOC 20346 - Managing Office 365 Identities and Services.
- 07/11/2012–15/03/2013 **Microsoft Appreciation certificate**
 Microsoft Albania, Tirana (Albania)
 Energy Network Optimizer, The Main topic of our project was : "The optimization of energy Network using Technology".
- 01/11/2011–21/01/2012 **Certificate of completion of the course - Training in c++ programming**
 Albanian - American Institute "Harry Fultz", Tirana (Albania)
- 10/11/2012–15/02/2013 **Certificate of completion of the course - Training in VB.Net**
 Didactic Center IRISOFT, Tirana (Albania)

PERSONAL SKILLS

Mother tongue(s) Albanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Cambridge Center Unicam EXAM					
Italian	C1	B2	B2	B2	B1
Spanish	B1	A2	A1	A1	A1

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

Communication skills -Able to communicate effectively with a wide range of people, by showing interest and carefully listening to their needs.
 -Strong presentation and demonstrating skills; Confident, articulate and professional speaking abilities.

Organisational / managerial skills

- Proposing ideas
- Skilfully applying professional knowledge
- Analysing problems

Job-related skills

- Pentaho Data Integrator, MDX, ETL,
- RabbitMQ message broker software, Protégé, Jena, Sparql
- MATLAB
- BPMN 2.0
- CCS, TCCS, Automata, UPPAAL
- ASP.NET, C#, VB.NET
- Microsoft SQL Server
- HTML 5, JavaScript, CSS3
- Windows Server (Active Directory)
- PL/SQL (Oracle 11g)
- Information Security
- c programing C++/CLI Oracle RAC
- Software Engineering
- Microcontrollers
- Android Development, Java
- GIS (Google Maps)
- Server Architecture, Internet Systems

Other skills

Creative and curious:

In this section i will describe my creative and curious skills. In my opinion being creative is something that cannot be learned, is something with which a person can have when he/she comes in this life. Since i was a little boy i was curious about games that i was playing, about the way they function. So since i was a little boy, i saw this electronic games from a different point of view. I was playing with these games but in the meantime i was thinking how this thing work. Every game the others gave me was destroyed by me. I was curious what was inside those games. And then with this parts of this games i made my own games that were similar to the other games that were produced by industry. I used cardboard to design my own electronic cars and then i have added in that sample car body designed by me the parts that i had taken from other electronic games. In this way i have been creating customized electronic games for myself. Years later when a computer came to my home, i was fascinated with this device. During the first month, I was staying in front of it almost every day and exploring this electronic device that years later was going to be my future.

Projects – Short Description:

- **RAI - Implementation of an enterprise system for audio/video files transfer.**

Atos has chosen File Catalyst software products for the implementation of this file moving system. I have been implementing and testing File catalyst software products during the first acceptance test phase of the project. This sample testing environment was built to verify RAI system requirements. I have also published a documentation with all the test results.

- **TheSpaceCinema - Developing a Windows Service for MS Dynamics CRM 2013 - BO data integration**

This was a .NET project. I have used with Visual Studio 2010 and C# as a programming Language. The windows service gets data from the CRM using soap request and then generates CSV files in output. This CSV files then are imported to the BO server. I also developed a desktop app that will allow the user to modify app.config file and manage the windows service.

- **COCA COLA - Data Sharing File Integration System.**

This is a project developed by Atos for CCH. I have been part of this project for about 6 months. The system was developed using TALEND as a data integration tool. It takes in input sales sent by different clients in different format files and converts this files into xml file, that has to be compatible with the coca cola standard xml format. I have been testing the system, integrating files and processing files.

- **Master's Thesis – Trust Management in a Multicloud Computing Environment**

This thesis is focused on trust management in a multi-cloud environment. It describes an approach proposed to build a special system to manage trust management in a multicloud computing environment. Without appropriate security and privacy solutions designed for clouds, this potentially revolutionizing computing paradigm could become a huge failure. This thesis illustrates some of the most important security and privacy challenges in clouds. The system is composed by 3 main components: Trust manager, Monitoring process and Knowledge DB. I have built a test environment using Openstack as an open source cloud platform and jclouds as a framework that allows the trust management system to communicate with different cloud providers using api's, in this case with

openstack.

For more information about my master's thesis:

<http://www.slideshare.net/MikelBerdufi/mikel-berdufi-universityofcamerinothesis>

- - **jHoles: A Tool for Understanding Biological Complex Networks via Clique Weight Rank Persistent Homology.**

I have contributed in this project. This is a research project published online by my professor Emanuela Merelli and Matteo Rucco. They taught me Distributed Calculus & Coordination and we have done this project as part of this subject. We have studied the evolution of immune system of our body after introducing an antigen. We have used C-ImmSim for simulating the immune system. After the simulation a set of files were generated and this was the part in which the analysis start. I built a tool that is able to detect if there are any invariants that matches during the evolution of the network.

For more information:

<http://www.sciencedirect.com/science/article/pii/S1571066114000577>

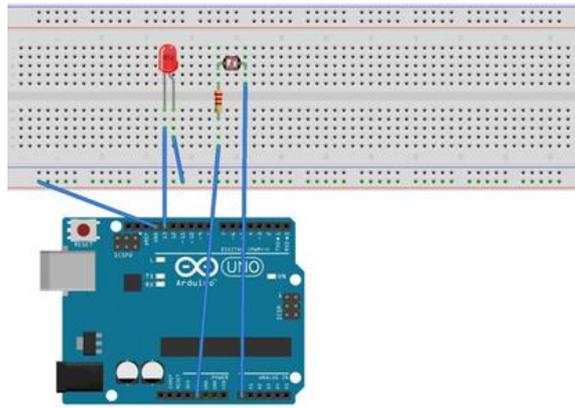
<http://www.topdrim.eu/2014/06/jholes-a-tool-for-understanding-biological-complex-networks-via-clique-weight-rank-persistent-homology/>

<http://dl.acm.org/citation.cfm?id=2658518>

- - **Intel Galileo - Electricity flow monitor sensor.**

The sensor is a combination of (photo resistor and Led light). The idea of using this sensor is to catch if electricity is running on specific building or no. Led light and Photo resistor are placed face to face with each other and isolated with dielectric material to not allow the entry of ambient. Led light is connected to electricity wires and electricity turns on the LED. If the Led light is on we know that the electricity is running on that building and photo resistor will catch high values. In the opposite case, values returned by the photo resistor are close to 0 and all this values are captured by Intel Galileo (a new type of Arduino Microcontroller). In order to capture data from Arduino we need to convert it to a web server that accepts http client request and gives response to user in html format. The response is 0 (in case when there is no electricity in the building in which Arduino is placed to work) or 1 (in case when the building has electricity). It is supposed to have a live detection of electricity flow problems in Energy Network Units, so the control center of Energy Distribution Company must use the web Interface that I have built to capture data from Arduino. IN this web interface is controlled the value returned by Arduino and if the value is 0 then the user of the web app is notified that in that energy Network Unit the electricity is not running. This project actually is another functionality.

Some images of this project:



- - **AIO Open Data-V1**

AIO OPEN DATA is an Android mobile application. It is related to open data? The App allows users to search on different open data sites by country. After user opens the app, a list of country is shown, after user choses one country, then another list of open data sites for that country is shown to user, then after user selects a site, a search interface with the latest news of that site (chosen by user) is shown, User has the possibility to search on that site.

I have used:

1. Google_custom_search for the searching procedure.
2. Yahoo pipes for the news feed of each site.

I think this would be helpful for those people who are interested on this kind of data on different countries, With this app the search is going to be more fast and efficient because they are going to have almost all open data sites in one mobile app with a news and search interface

Some images of this project:



- - **Vote & comment**

Vote & comment has been one of my university projects that I realized during the Bachelor degree. The Idea of the project is to create a common virtual environment to some competitive groups that are part of competition presenting their projects. In this virtual environment, each of the members of the competitive groups has an account. Each user that is part of this shared virtual environment can see a list of competitive groups projects.

This app allows user to:

- 1) visually see the descriptive material of each competitive project.
- 2) express an opinion about the projects through commenting.
- 3) vote for one competitive project that he thinks is more interesting through Voting interface.
- 4) Look at the Voting results.

Users are not allowed to:

- 1) vote more than one time.
- 2) vote their own project.

Some images of this project:

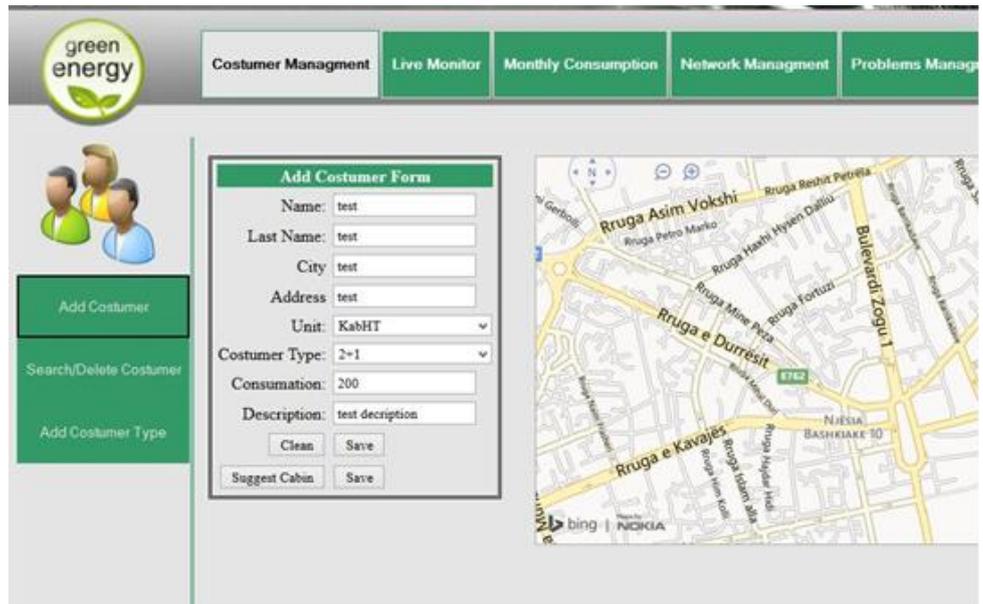
- Management of clients/staff data (for the clients it manages the amount of energy consumed and regarding the staff it supervises their work)
- Automatic detection of issues from sensors
- Registration of reports by clients and assignment of work to operators
- Mapping of the energy distribution centrals and cabins (using GIS)
- In case we will want to add a new cabin in a certain area, the software will suggest the best position to build it.

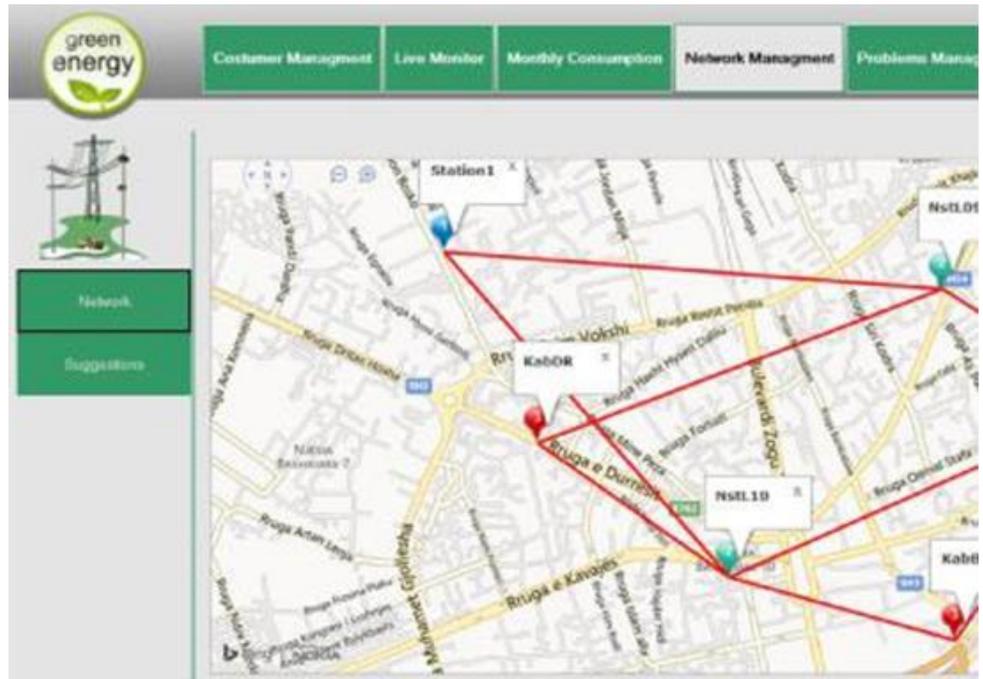
The technologies that will be used are: .Net (ASP.Net Version 4.0), C#, GIS (Bing maps), CSS and JAVASCRIPT for the web page, SQL SERVER, IIS as a web server.

With this software, we hope to optimize the QOS (quality of service) in ALBANIA. This project is an innovation because one of the reasons that our country has a problem with such sources is the lack of information and lack of cooperation between organizations.

Good management means sustainability in the resources and in the economy.

Some images of this project:

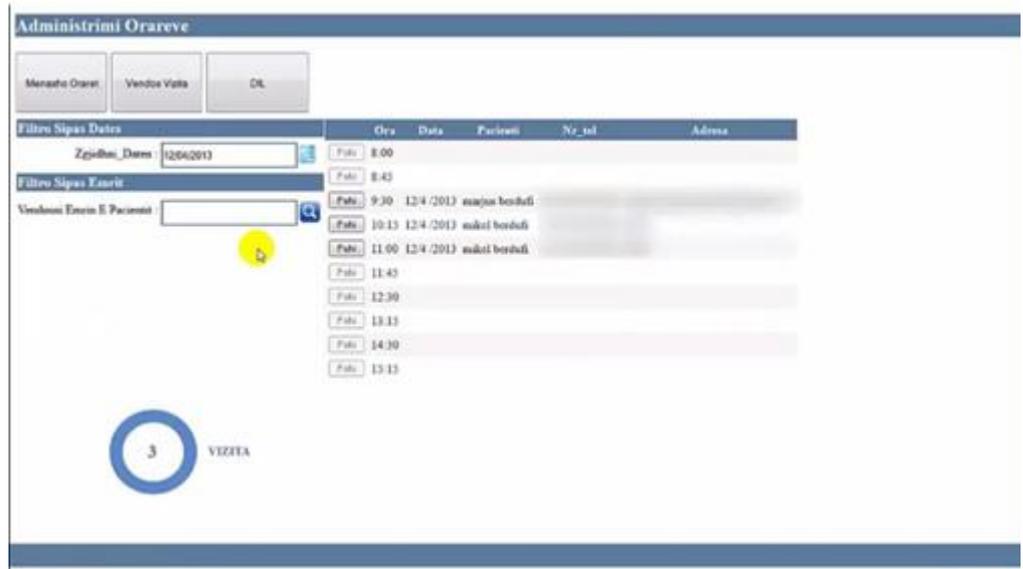




- **Dental Online Appointment**

This web application allows clients to request an appointment with dentist to his clinic. All the free and busy times of the dentist are shown on a table that user can see and then decide which time is best for client. one of the goals of this project is to eliminate the row of people waiting to take the service from the dentist. But also, the project will help the dentist to manage better his time and work with the clients.

Some images of this project:



- - **Small Search Engine**

Is an application, whose function is similar to search engines. Primary Functionality is to search on database for all those similar words that the user puts in a textbox as a keyword and show all those links, which contain these words. The web app shows an ordered list of result based on the number of words that links contains. For example: if user search for a word "Google" the first in the list will be that link that contains the greatest number of this word.

Some images of this project:



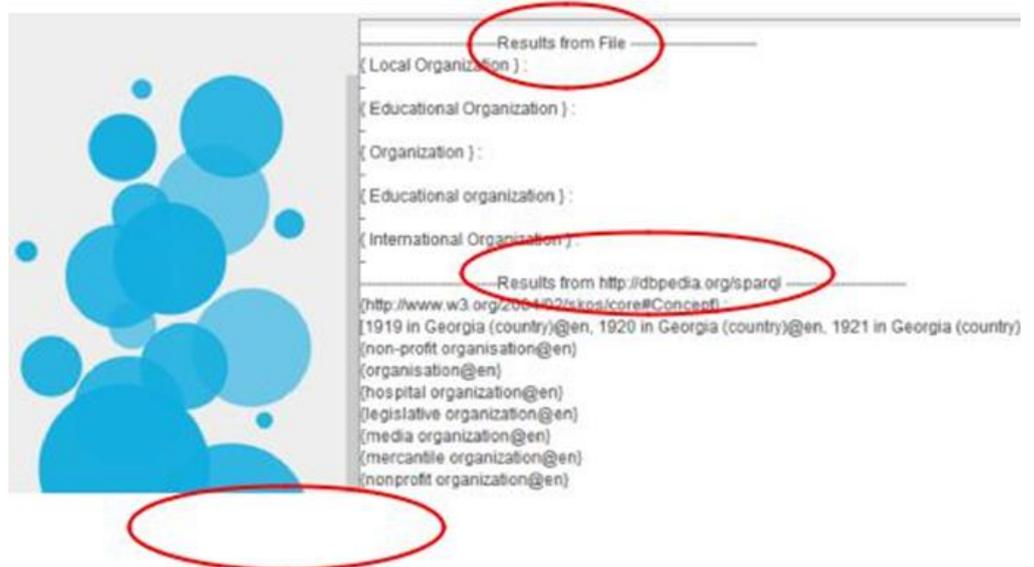
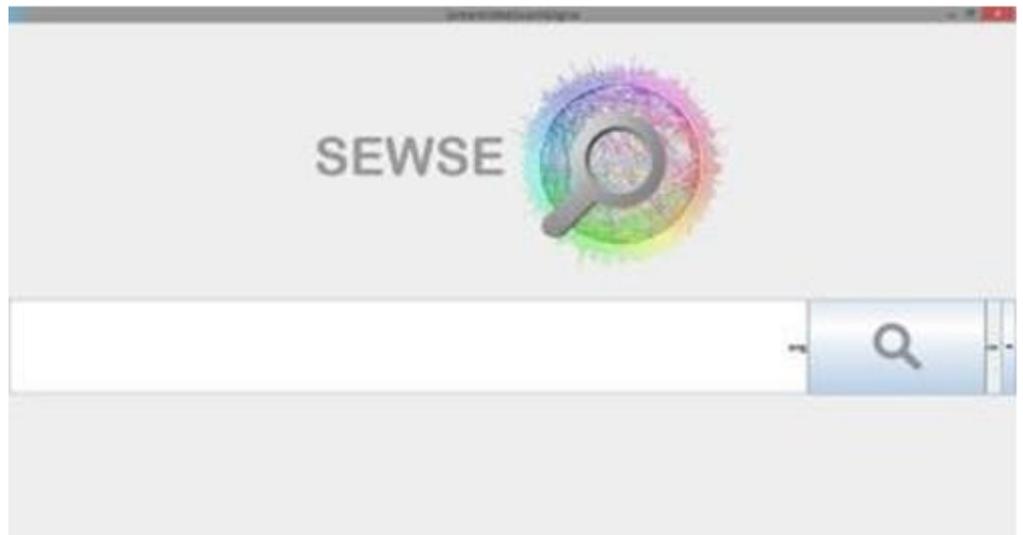
- **Semantic Web Search Engine (SWSE)**

Semantic Web Search Engine (SEWSE) is a small semantic web search engine desktop app that allows the user to:

- Search from ontology files stored locally
- Search from different Sparql endpoints online (DBPEDIA)
- Search in different language.

After collecting the information from this different sources the result is shown to the user in just one single interface. Until now the user is able to select one of the 3 languages provided (en,it,es). User selects the language, puts the keywords and then just press the search button and waits for the results.

Some images of this project:



- - **UBIMarket**

UBIMarket is a small ubiquitous system applied to a supermarket scenario. It is based on the idea of ubiquitous computing in which we have that computing must appear anywhere and everywhere in our life, helping us more than computers do actually. The idea behind ubiquitous computing is that every different system must interact with each other because in this way they are more powerful, helping us, taking autonomous actions. And then a user using a device can interact with this big system (“ubiquitous”).

UBIMarket is composed by 3 types of applications:

1. UBIMarket_Producer_Java_app, a java desktop application that allows the producer to publish offers.
2. UBIMarket_Producer_Android that allows the producer to publish offers using its smartphone. This helps the producer to use the system every time.
3. UBIMarket_Consumer_Android that allows the consumer to receive offers in real time.

Some images of this project:

