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Education

- High school "A.T. Laurian" Botoșani, profile of Computer Science and Mathematics with Intensive English, class of 2009-2012
- University of "Stefan cel Mare" Suceava (Romania), College of Electrical Engineering and Computer Science, majoring in Automatics and Applied Computer Science

Certifications

- Cambridge ESOL Level 2 Certificate in ESOL International – Council of Europe Level C1 - Grade B
- Cisco CCNA Discovery: Working at a Small-to-Medium Business or ISP
- Cisco CCNA Discovery: Networking for Home and Small Businesses
- British Academy of Business and Communication: Leadership and Management Communication – 9.33/10
- British Academy of Business and Communication: Business Communication – 9.67/10

Responsibilities

- Wrote and implemented efficient code, according to the received specifications.
- Handled client communication when needed, to offer technical advice and solutions, and further plan development. This included offering real world practicability for some of the requirements of the client.
- Coordinated with the other developers on the team to achieve the objectives set for us in the designated timeframe.
- Kept taking online courses when I had the time, in order to continuously improve my skills.

Competencies

- Design, implementation and troubleshooting of network infrastructure.
- Cisco network equipment configuration.
- Embedded Linux distribution optimization.
- Linux and Windows desktop application development.
- Automotive virtual dashboard application development with CGI Studio.
- Good C# WPF debugging and feature adding capabilities with Visual Studio.
- Experience in using versioning software (Git and SVN).
- Experience in using Markdown for documenting projects and also for generating static websites using the Hexo static website engine.
- Good abilities with using MongoDB as a storage solution in NodeJS backend applications as well as SQLite in C# WPF desktop applications on Windows and C Linux applications.
- Experienced with implementing custom Stripe payment solutions.
- Knowledge of embedded systems concepts (communication protocols, debugging techniques, vendor terms regarding chip capabilities, prototyping with future production costs in mind).
- Experimented in optimizing graphically intensive OpenGL ES applications (I can test 3D models with Blender, generate textures for 3D models with GIMP, generate animations for the models I use and I have a good knowledge of extension compatibility with 3D production software – specifically 3DS Max).
- Experience with adding video codec support to WPF applications.
- Experienced in writing good, clear and to the point documentation, with an emphasis on user experience and good feature presentation of the documented product.

Work experience

- September 2019 – present – intermediate software developer at OSF Global Services where I do fullstack .Net Core development using Angular for the UI components.
- November 2017 – present – junior software developer at OSF Global Services where I do NodeJS backend application development using the Express Framework and .Net core fullstack development with Angular on the UI components.
- Octomber 2016 – October 2017 – junior software developer at Silicon Service where I did C# WPF desktop application development and OpenGL ES application design.

Internships

- January 2016 - October 2016 - Intern at Silicon Service.

During this period of time I did: Linux desktop application development with C, PIC microcontroller programming for embedded applications, C# WPF Windows desktop application development.

- 17th of June 2014-16th of September 2014 - Intern at Assist Software Suceava.

During this internship I did ASP.NET development for 2 weeks and Unity mobile game development for IOS with Javascript for 2 and a half months.

Programming languages

C	medium	**JavaScript**	medium
C++	beginner	**Python**	beginner
C#	beginner	**Markdown**	beginner

Development environments

Microsoft Visual Studio (for C#)	**Blender**
Eclipse (for C++)	**Gimp**
PyCharm	**CGI Studio**
Webstorm (for Markdown)	Cadsoft Eagle (PCB design)
Visual Studio Code (for JavaScript)	Solidworks (3D modelling and stress test simulations on the created models and 3D modelling for 3D printing)

Foreign languages

	Writing	**Understanding**	**Reading**
English	Proficient	Proficient	Proficient
Italian	Beginner	Average	Average

Thesis theme

My thesis is named "Interactive advertising system", and brings innovation to advertisement by adding an interactive component in the system, through which, the target user can control some aspects of the advert.

I use a Kinect V2 sensor, which is connected to a PC, on which a C# WPF application is running. The application uses the data it gets from the Kinect and draws on a screen the silhouette of the user. Then, inside the users silhouette, and advert is drawn, which fills up the interior of the silhouette.

For detecting the silhouette, I use the Canny Edge detection algorithm, which is a part of AForge.NET. Then I build the polygon by uniting the points I detect and "filling" the created contour with the advert I want the user to interact with. The interaction is accomplished by "keeping up" with the movements of the user and maintaining a clear form of the silhouette in which the advert is placed.

Competition participations

- **20th of november 2015 – Local competition 25H-placed 2nd – digital press kiosk, with interaction based on vocal and gesture recognition with Kinect**

  Through this application we aimed to highlight the capability of the Kinect sensor to interpret the vocal and gesture commands of a user.

  The software was developed using C# WPF and it displayed an Earth globe with logos of media conglomerates on its surface. Information source selection was implemented by using vocal command, and the information sources were accessed with the browsers (Firefox or Google Chrome), which were controlled with Selenium WebDriver. The user would navigate through the web page by using predefined hand gestures.

  My contribution to this project was the C# WPF application that controlled the 3D Earth model when receiving gesture data from the Kinect sensor. Also, through this application, the user controlled the browser and accessed information sources with gestures and voice control.

- **25th of April 2014 – "Microcontrollers and applications - Mihail Konteschweller",Iași –Smart Electric Car**

- **8-9th of May 2015 - Electromobility Continental, Iași- Smart Electric Car**

The aim of this project was to create a model car which would autonomously finish a lap around a predetermined track.

An inductive sensor was used to read the start and finish lines. The car direction resulted from interpreting the data flow supplied by the four ultrasonic sensors in front of it, to which I applied a median filter. Steering was implemented by using differential rotation speed for the two BLDC motors in the front of the car.

The central component of the system was an Arduino Uno development board, to which I added the inverters for the two BLDC motors and a current sensor, which allowed the implementation of diagnosis for the system.

We used Bluetooth to communicate with the user and the control interface was developed in Java, for the Android operating system.

My contribution to the project was represented by the hardware component (picking the microcontroller platform, and the other components that were used - the MPU6050 module, inductive sensor, assembly of the PCB board), the mechanical part (chassis design and assembly, 3D modelling and 3D printing for some parts) and the implementation of the median filter (I used C for this).

- **30th of octomber 2014 - Local competition 25H-placed 4th - computer control with haptic feedback**

The purpose of this project was to implement a system for controlling a PC while using a Leap Motion sensor.

The software component was made up of a C# application and the hardware component, through which the user received haptic feedback from the system, was made up of a glove with 7 micro vibro motors, which let the user know when the controlling hand left the sensing radius of the Leap Motion.

My contribution to this project was the microcontroller application that controlled the micro vibro motors that were placed on the glove.

Personal interests

• **Industrial design.**
• **Staying up-to-date with the latest trends in embedded systems, Linux and JavaScript.**
• **Going to the gym regularly, jogging and eating healthy.**
• **Reading philosophic, military, historical and political literature.**