

PERSONAL INFORMATION

Dragoş-Mihai Mocanu

📍 Constanţa (Romania)

☎ +40 727 885 336

✉ dm@dragosmocanu.com

🌐 <http://dragosmocanu.com> <https://www.linkedin.com/profile/view?id=237039051>

PERSONAL STATEMENT

The work spent developing a multimedia framework from scratch resulted in gaining valuable skills in the field of software architecture, as well as a strong C++, C# and HLSL programmer skillset. Currently seeking to further improve on those skills, with a view to moving into the AAA video game industry.

WORK EXPERIENCE

01/10/2013–07/07/2015

Thesis - Visual Realism in 3D Virtual Environments

My master's thesis involved visual realism in 3D virtual environments using my own multimedia framework. It involved using DirectX 11, writing C++ code and HLSL shaders to implement PBR (Physically-Based Rendering), shadows (PCF, VSM, EVSM, and EVSM4), HDR (tone mapping, bloom, and adaptive luminance), ambient occlusion (SSAO and HBAO), tessellation, anti-aliasing in a deferred environment (FXAA and SMAA), and a deferred lighting system.

The HDR component of the framework was presented at the Estic 2015 competition under the title of "Image Quality Improvement Techniques in Virtual Environments" where it won first prize.

The thesis was graded with a perfect 10 by every member of the committee.

01/07/2013–Present

Lead Programmer

Spectral Creations, Constanţa (Romania)

Self-employed freelancer under the label of "Spectral Creations"

- responsible for the quality of the final products and their development cycles
- released a game for Windows and Windows Phone using my own game engine

01/09/2012–28/06/2013

Thesis - Multimedia Applications Development Techniques

My bachelor's thesis consisted of developing game engines and presented "Ultima", a game engine developed by myself, running on Windows, Xbox 360 and Windows Phone, capable of 2D and 3D graphics, audio, input, etc. It was developed using the XNA/MonoGame framework, and C#.

The thesis was graded with a perfect 10 by every member of the committee.

EDUCATION AND TRAINING

01/10/2013–07/07/2015

Master of science

Universitatea "Ovidius", Constanţa (Romania)

- computer graphics
- software architecture
- artificial intelligence in virtual environments

01/10/2010–28/06/2013

Bachelor of science

Universitatea "Ovidius", Constanţa (Romania)

- computer science
- mathematics

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C2

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 - good communications skills gained from numerous team projects

Organisational / managerial skills - leadership experience from team projects and as lead programmer in an independent game studio

Job-related skills - solid programming skills using C++, HLSL and C#
 - extensive experience using DirectX 11
 - knowledge of software architecture and design patterns
 - experience with PHP and MySQL

Digital competence

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

Digital competences - Self-assessment grid

- experience with distributed version control and source code management systems (Git)
 - good command of photo editing software (gained as an independent designer)