



# gamaqora

Les formations professionnelles aux métiers du jeu vidéo

- D.U. Infographie 3d (bac +3)
- D.U. Level Design (bac +3)
- Master 2 CIM : programmation et développement

Le livret des étudiants 2007-2008



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## ERIC ANDRAL

### Infographie 3d

My studies in fine art provided me with training in the disciplines of illustration, comic book drawing, graphic design and cartoon drawing, which allowed me to perfect my technique in 3D software, within the context of video games. 3D software allows me to bring to life my creations and invite spectators into a world which goes beyond the limits of 2D.

Before creating a 3D background I sketch my first ideas in 2D. I then build this in 3D, whilst trying to remain faithful to my initial concept.

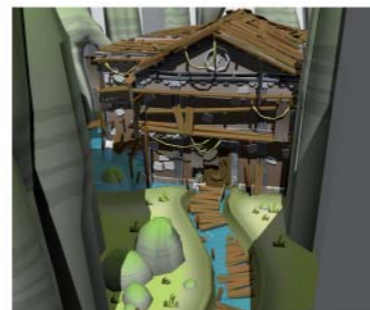
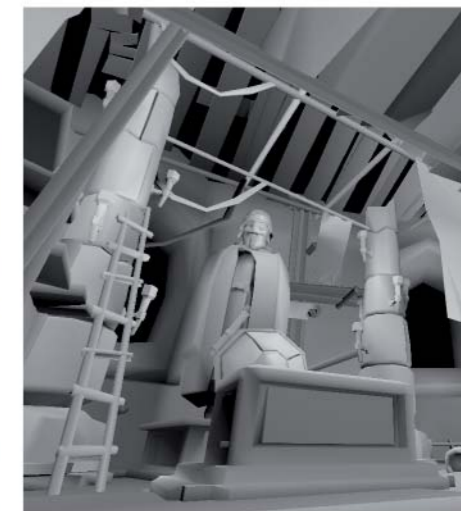
For this project I have chosen to model an abandoned temple. I wanted to create a colourful universe in the same vein as *The Legend of Zelda The Wind Waker*, which despite the low Poly modeling, is composed of distinct shapes. The textures and bright colours define the identity and function of the objects. To do this, I modeled and textured the objects with Maya 8.5 before integrating them into the Unreal Tournament 3 Editor in order to put the whole thing together.

*De formation d'art académique préparant aux métiers de l'illustration, de la bande dessinée, de l'infographie et du dessin animé, je voulais parfaire ma technique en logiciels de 3D dans le domaine du jeu vidéo. Cet outil me permet en effet de donner vie à mes inspirations et d'inviter le spectateur dans l'univers ainsi créé au-delà des limites inhérentes à la 2D.*

*Avant de créer un décor en 3D, je dessine mes premiers concepts en 2D. Je construis ensuite en trois dimensions ce décor en essayant toujours d'être fidèle à mes intentions initiales.*

*Pour ce projet, je souhaitais modéliser un temple abandonné. Je voulais créer un univers assez coloré, dans l'esprit de *The Legend of Zelda The Wind Waker*, où la modélisation en Low Poly dessine distinctement la forme des objets. La texture et les couleurs vives définissent ainsi l'identité et la fonction des objets.*

*Pour ce faire, j'ai donc modélisé et texturé les objets sous Maya 8.5 avant de les intégrer sous l'Editeur d'Unreal Tournament 3 pour scénariser l'ensemble.*





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## HABIB BAKAS

### Infographie 3d

My passion for making video games came while playing Final Fantasy 7.

At 15, I created a roleplaying association called « Ryuteam » with my friends, with the goal of developing a role playing game. I was in charge of the design of environments and characters with my best friend, who was the impetus behind my interest in drawing.

Ever since that time, I have been fascinated by Character Design.

During this year at Gamagora, I got acquainted with professional software such as Zbrush, 3DS MAX and Maya in order to infuse life and realism to my characters. Modelling for video games allowed me to better understand volumes and introduced me to the making of characters within the constraints of a game engine.

I enjoy the work of Alessandro Baldasseroni as well as Ian Joyner and aim to attain their professional skills and create my 3D characters in this fashion.

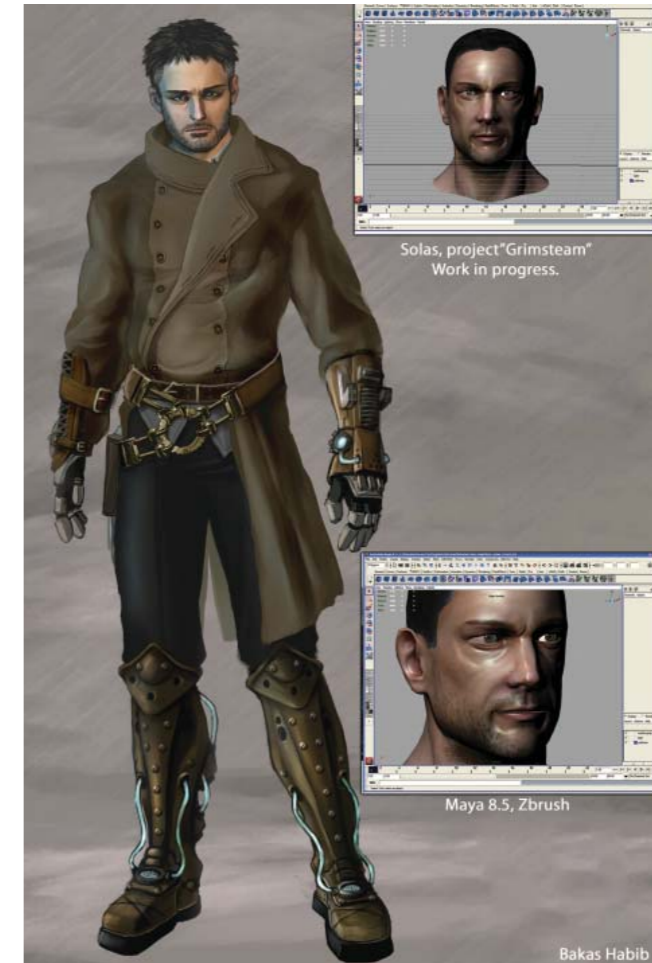
*Mon envie de créer des jeux vidéo est née en jouant à Final Fantasy 7.*

*A 15 ans, avec des amis, j'ai créé une association « Ryuteam » dans le but de développer un jeu de rôle (Role playing game). Avec ma meilleure amie qui m'a donné l'envie de dessiner, j'étais en charge du concept design pour les personnages et les décors.*

*Depuis cette date, je suis passionné par le Character Design.*

*Cette année à l'école Gamagora, je me suis familiarisé avec Zbrush, 3DS MAX et Maya afin de donner du volume et donner vie à mes personnages. Modeliser pour le jeu video me permet de mieux comprendre les volumes et m'aide à mieux concevoir mes designs de personnages dans les contraintes qu'impliquent les moteurs de jeux video.*

*J'adore ce que crée Alessandro Baldasseroni ou encore Ian Joyner. Un jour, j'aimerais pouvoir arriver à leur niveau et créer mes personnages en 3D comme eux.*





## ELODIE CESELLI

### Infographie 3d

My specialty is real life character animation, using 3DSmax while refining my modelling and traditional art abilities. I chose animation as my area of expertise because I am fascinated by how the body moves. I like infusing characters with life and giving them a distinct personality. My goal was to develop the necessary skills to produce animations good enough to be used with current and next generation video games. I also use traditional 2D animation as a way to decompose body movements. I like the fact that traditional 2D art is intertwined with 3D art.

I participated to the making of Grim Steam, a First Person Shooter with investigation elements. The different tasks which I attended to were: Conceptual environment drawing, animation, character setup and skinning, items and weapons modelling as well as environment elements.

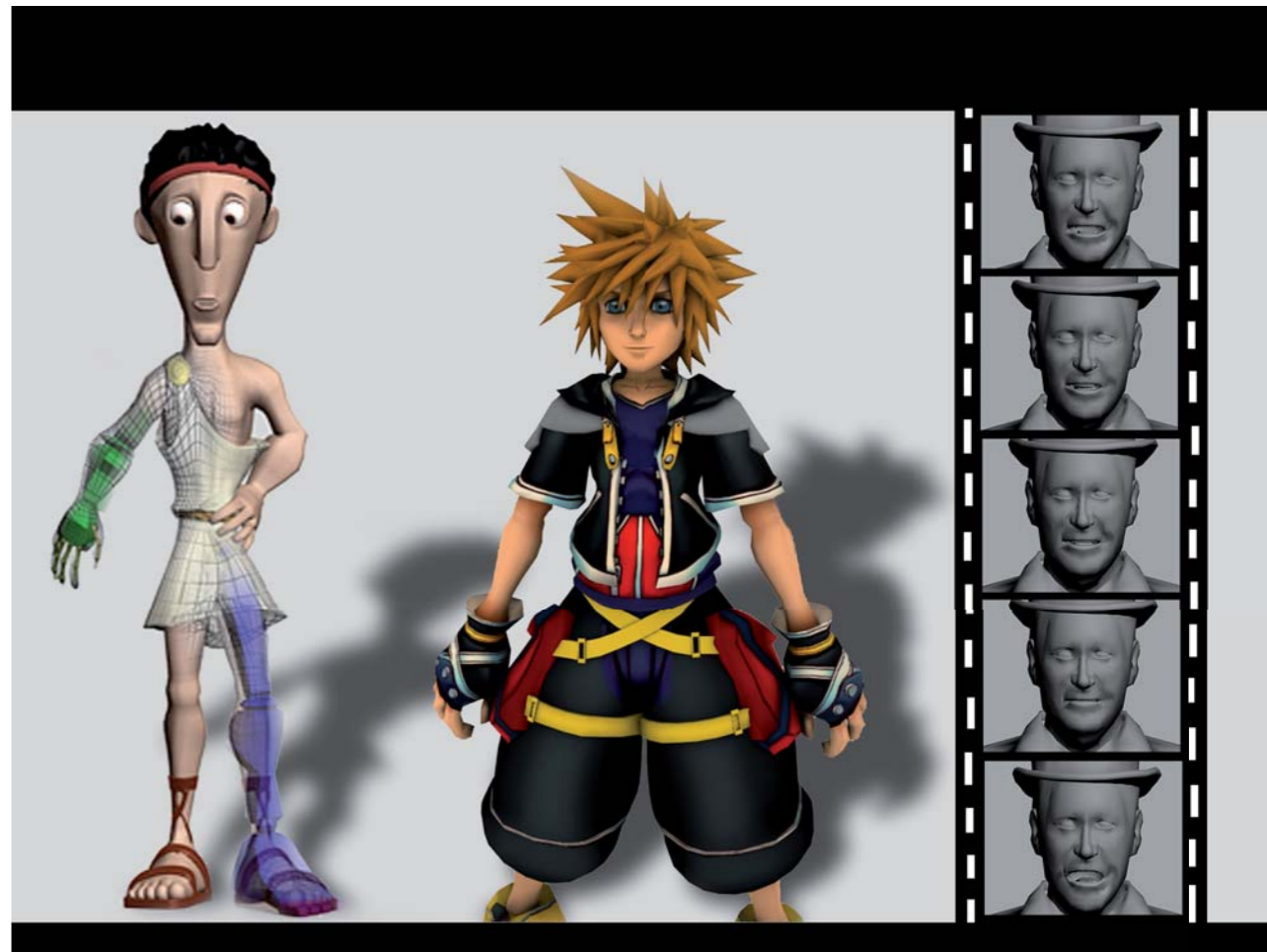
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Visuel : Modélisation, Skinning et animation d'un guerrier grec pour le court métrage Maximinus. Modélisation de Sora tiré du jeu vidéo Kingdom hearts II. Animation faciale d'un personnage de Grim Steam.

*Ma spécialité est la création d'animation de personnages réaliste, en utilisant 3dsmax tout en affinant mes compétences en modélisation et en arts traditionnels. J'ai choisi l'animation comme zone d'expertise car je suis fascinée par le corps et sa façon de bouger. J'aime donner la vie aux personnages et leur donner une personnalité différente pour chacun d'eux. Mon but a été de développer les compétences nécessaires pour concevoir des animations pour les jeux d'aujourd'hui et de demain. Je me sers aussi de l'animation traditionnelle en 2D pour pouvoir décomposer les mouvements du corps. J'adore la façon dont l'art 2D traditionnel est étroitement lié avec le monde 3D des jeux vidéo.*

*J'ai participé à l'élaboration du projet Grim Steam, un FPS avec des éléments d'enquête. Les différentes tâches auxquelles j'ai participé sont : La création des concepts du décor. L'animation, le Setup et le Skinning des personnages, des armes et objets et la modélisation d'éléments du décor.*





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## JEAN-CHRISTOPHE DEYAGERE

### Infographie 3d - Sound Designer

My focus studies was for this year to develop an original and immersiv 3D world using "next generation" technologies. I started with a very simple idea of game, a pinball. My work has consisted to create a living world using for example normal mapping and alpha channel on textures . I'm specialised in low poly 3D modelisation and sound design. I know the needs of next generation games developpment. The difficulties for this work were to make very light models in terms of file's weight, textures and sounds to optimize the game and make it fluid. To increase the realistic aspect of the game I added a lot of sounds and noise's environment triggered by the ball along its way. All those assets and sounds are after being created assembled in a 3D engine.

*Modeleur 3D spécialisé low poly et sound designer, cette année d'étude fut l'occasion pour moi de mettre en pratique l'ensemble de mes compétences. Mon travail a principalement consisté à recréer à partir d'un concept basique de jeu (un flipper) un monde 3D vivant d'un point de vue sonore et graphique. Cette démarche repose au niveau graphique sur l'utilisation de modèles 3D détaillés et de techniques de texturing dites de nouvelle génération (utilisation du « normal mapping » et du « glossy metal » par exemple). L' univers graphique de ce jeu a été développé dans le respect des contraintes techniques actuelles (low poly, économie en terme de nombre de polygones), ceci afin d'optimiser le processus de jeu. Pour accentuer la véracité du game play et son efficacité j'ai par la suite construit tout un environnement sonore (bande son, bruitages, et sons ponctuels) pour accompagner l'action. Tous ces éléments ont enfin été assemblés à l'aide d'un moteur 3D utilisant un langage de script Lite-C.*





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## FRÉDÉRIC FOUQUE

### Infographie 3d

Character modeler low / high poly  
The dead politician « Grimsteam project »

The goal of my studies was to know the workflow production of video game and to know the work of different actors who compose it. Before this degree I used to work in the animation film industry as a 3D artist.

For the "Grim Steam" politician character, I started drawing it in Photoshop adding as much detail as possible on the head because it had to be realistic. Then I began modelling out the low poly mesh of the character, giving it the right proportions. High poly modelling followed according to the original mesh, to be able to transcribe the fully detailed model into the low resolution twin.

It was a challenge in terms of design because it needed to be old looking but not too wrinkled in order to apply the high resolution model on its twin without losing detail.



The politician  
Grimsteam Project



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## YOANN GODIET

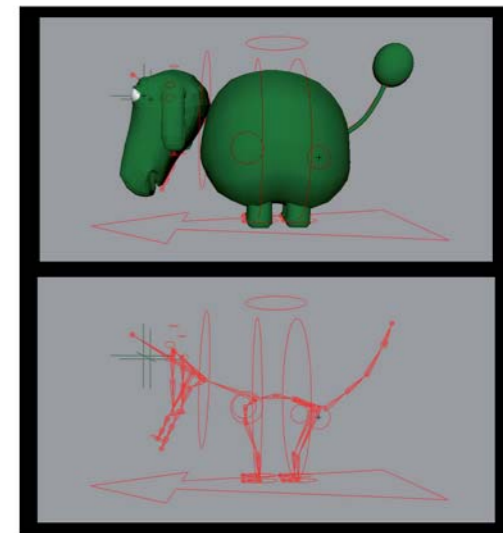
### Infographie 3d

Graduated student of an animation school (Esma Montpellier), I have a previous training on the whole production pipeline of a 3D animation movie. Then, I have been trained at the Gamagora School to the video games constraints.

The curiosity and the sensibility I have developed are making me taking interest in very different kind of universes, that you may see on my website. My skills are allowing me to be integrated at any step of the production process, with a particular taste for the modeling and texturing of characters and props.

*Ancien diplômé d'une école de cinéma d'animation (Esma montpellier), j'ai une formation initiale sur toute la chaîne de production d'un court-métrage 3D. J'ai ensuite suivi avec la formation Gamagora une formation aux contraintes spécifiques du jeu vidéo.*

*La curiosité et la sensibilité que j'ai développé m'amènent à m'intéresser à toute sortes d'univers, visibles plus en détail sur mon site. Mes compétences m'amènent à pouvoir m'intégrer à toute maillon de la chaîne de réalisation, avec une plus grande affinité pour la modélisation / Texture de personnages et décors.*





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## MATHIEU GUILLAUME

### Infographie 3d

I'm interested in 3d graphics since I have found "WorldCraft" the "Half-Life" level editor. After learning how to design and to create a level I questioned myself about the way to create the 3D which feed it. So, I was able to start Maya 6 and followed by 3DSMAX.

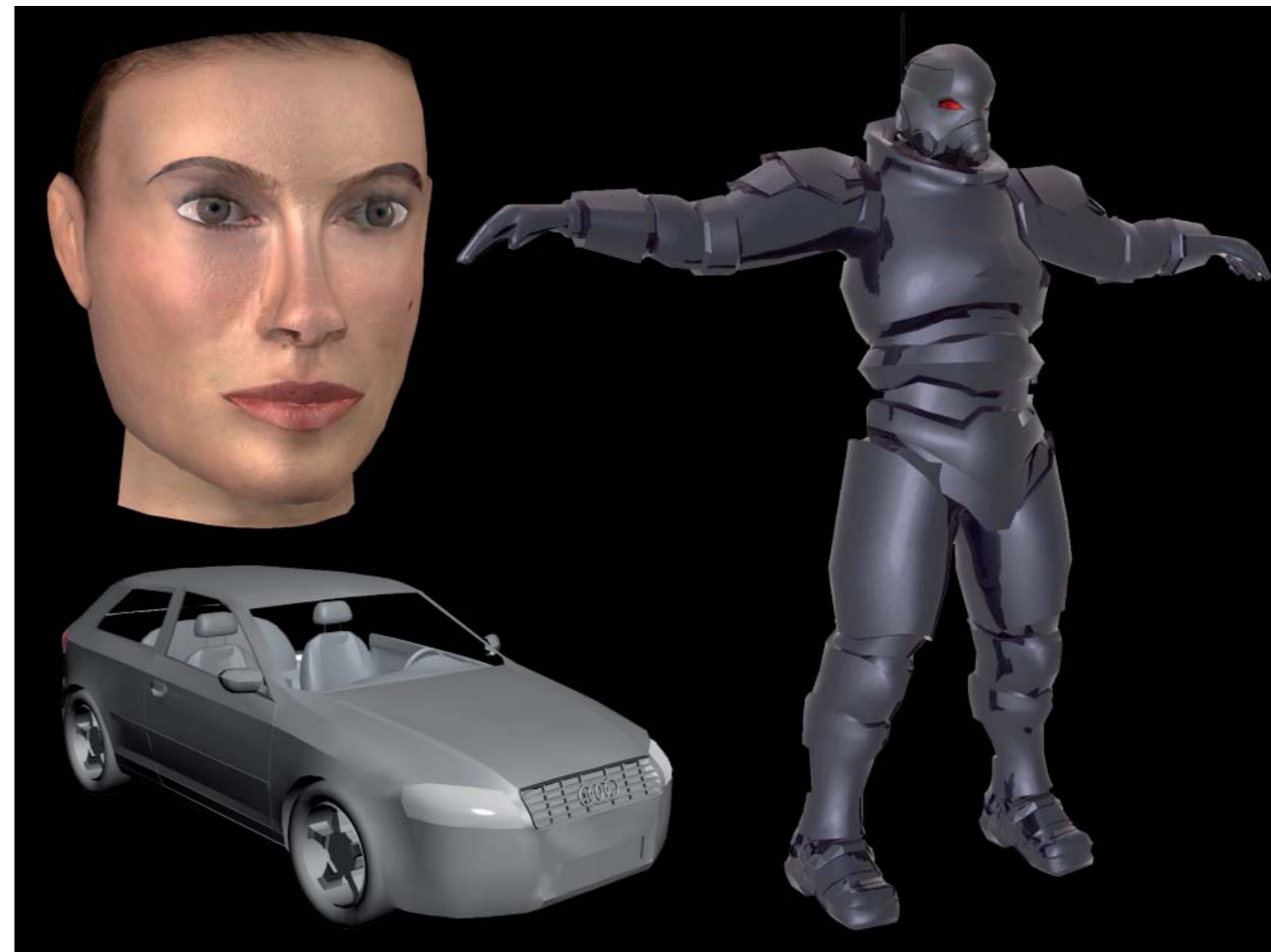
I have built the car in using Audi A3 blueprints. This car allowed me to achieved a crash test animation.

The soldier in armor is low poly model taken from a art concept, while the woman face is taken from a real photo. By using this image with Photoshop I created a skeleton wired, which once exported in texture 3Dsmax helped create a 3D model.

*Je m'intéresse à l'infographie depuis que j'ai connus l'éditeur de niveau de Half Life, « WorldCraft ». Après avoir appris la manière de concevoir un level je me suis interrogé sur la façon de créer la 3D qui le nourrit. J'en suis donc arrivé à débiter Maya 6 et par la suite 3Dsmax.*

*J'ai conçus la voiture en utilisant des blueprints d'Audi A3 cette voiture ma permis de réaliser une animation de crash test.*

*Le soldat en armure est un model low poly repris d'un concept art alors que le visage de femme est pris d'une vraie photo. En utilisant cette image avec photoshop j'ai crée une squelette filaire, qui, une fois exporté en texture dans 3Dsmax ma permis de créer un model 3D.*







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## STÉPHANE HUGUET

### Infographie 3d

German racing vehicle concept : « Cyclone »

The "Cyclone" prototype was painted as a military vehicle modified to be driven through a high speed car race. The way to pilot it was supposed to rely on both speed and aggressivity. This tough-lined 4X4 is based on the german WWII SdKfz 250 Halftrack, mainly used as an armoured carrier. The main challenge in my work was to add some "speed" in the line of this hefty like machine. I first started to modify the original car's line to build a race line from it. Part of this action consisted in adding details coming from others vehicles' elements. For example the cockpit, stolen from a Bf 109 Messerschmitt, reinforces the speed aspect by giving the player a comparison to this well known fighter aircraft. After founding a good speed shape, I reinforced the line using some Stug IV armoured plates on both side of the car. I finally found the right balance between speed and strength for this middle weight vehicle. The result is a blade shaped vehicle, suited for both race and combat, perfect for players like me who like to crush down the opponent as well as mastering the track!





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## RICHARD MALINAR

### Infographie 3d

ART CREATION  
ENVIRONMENT ARTIST

The creation of environments for video-games is a field that interest a lot, my main goal is to work on the graphical aspect like volumes, colors and lighting, but to participate to the scripting of the level as well. I love to put together both the artistic part and the level design part to give personality to my environments.  
I have a strong background of 3D real-time techniques, especially concerning low-poly/mid-poly modelisation but also texturing.

On the picture shown, a multiplayer level for Source ( the Half-life2 engine ), I made the modelisation and all the textures of the scene. I used 3DSMAX to do the props, hammer editor for the brushwork plus scripting and photoshop to make the textures.





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## JESSIE MARTEL

### Infographie 3d

I have always felt attracted to drawing and 3D modeling and designed my education according to my passion. By obtaining my baccalaureate in Graphic Design and Communication, as well as spending two years working for different graphic design companies, I was able to reach my first goal.

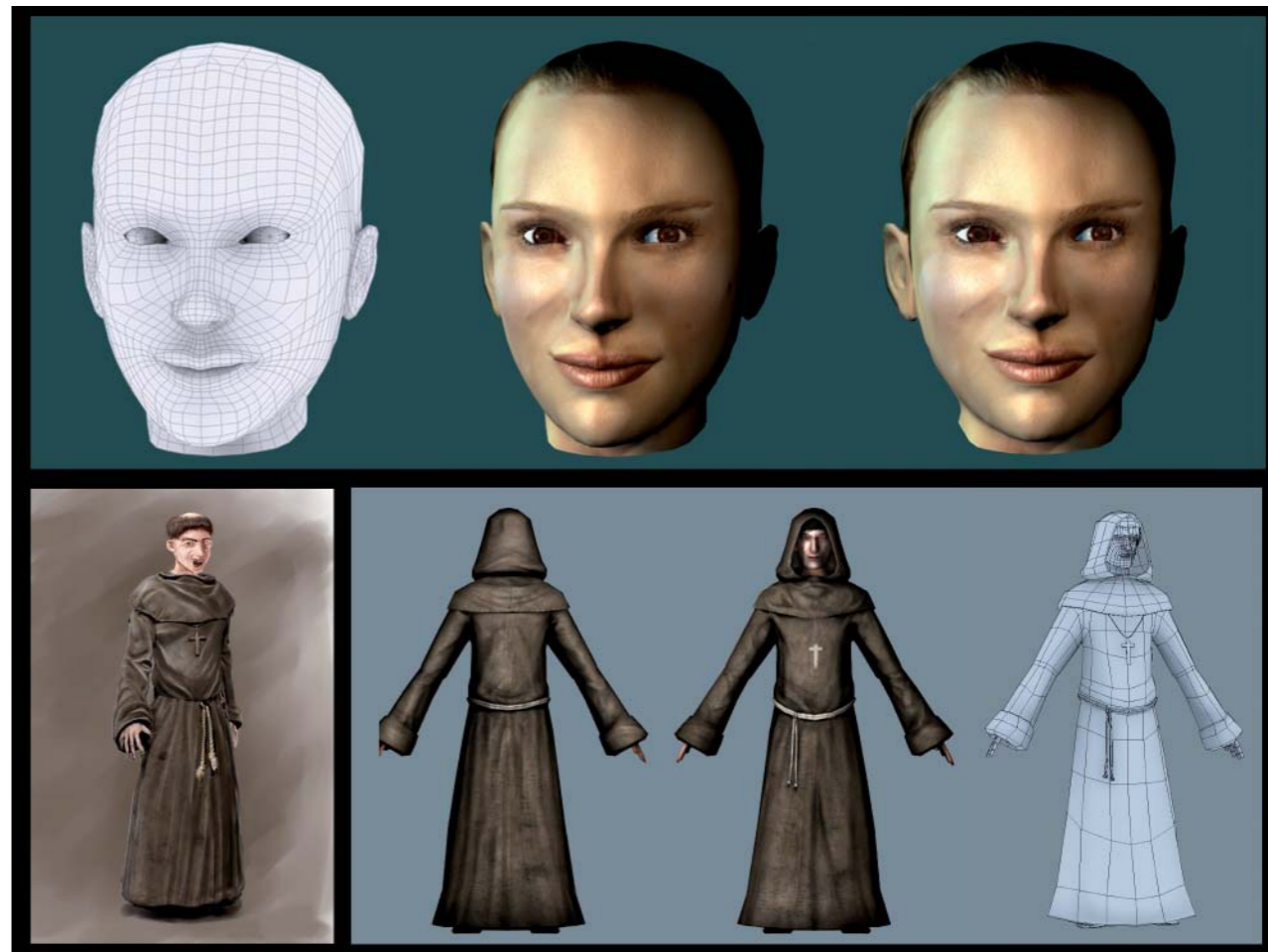
My first professional experiences helped me publish my first productions as a Graphic Designer for several advertising companies. Through my passion for Video Games, I strengthened my abilities and decided to specialize in 3D modeling, thus spending some time learning by myself.

With the opening of Gamagora, I saw the opportunity to acquire the many techniques and trades of the Character Designer and the 3D Artist thanks to the video games professionals who came to help us. Through their support I was able to increase my knowledge in 3D modeling as well as character and environment design.

The professional education I received from Gamagora not only helped me acquire the necessary skills for my career, but through the final school project I developed my teamworking abilities with programmers and level designers.

The experience I acquired throughout my education allows me to be fully functional as a character designer and 3D artist, be it from a technical, creative and teamworking point of view.

Today my goal is to unite my passion with a career by joining a video game studio.





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## WILFRIED VELASCO

### Infographie 3d

Drawing since my earliest years, I was quickly drawn to 3D modeling to concretise my creations. In order to experiment further in this extremely creative domain, I applied for a Bachelor's degree in Computer Engineering specialized in Digital Imagery, then I completed a three-year professional diploma in Sound and Imagery. Upon completion of this diploma, I applied to a professional degree in 3D modelling and Character Design at Gamagora in Lyon to learn about video games and make this my area of expertise.

I am organized, persevering and I am able to integrate a team that is evolving in a fast paced environment.

Included herein is a character from the project I worked on during my stay at Gamagora. The project is an investigation game that takes place in a monastery, inspired mainly by the famous film "The name of the Rose".

I made this character with the help of 3DSMax for the low-poly count model, and Z-Brush to add detail and finish the model in high-poly count. I used this method to give the character some depth and increased realism.

My wish now is to work in the video game industry as a 3D artist, be it as a modeller or an animator, two fields I am quite passionate about.





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## JEAN-EDOUARD BELLINI

### Level/Game Design

I played my first video games at age 3 on a Commodore 64 and a Master System. I was always fascinated by the endless possibilities of gameplay creation and its implementation in an actual video game. Through my passion for history and civilization, I wrote a lot of scenarios and backgrounds for the small worlds I created.

I always wanted to combine my love for world building and video games, and being a Level Designer allowed me to fulfil that dream. After obtaining my master's degree in English Civilization, Literature and History, I was accepted into Gamagora, a school of video game design, where I was able to further develop my knowledge of game engines. I also was the initiator and lead designer of the Grim Steam project, a Total Conversion FPS based on the Unreal Engine 3, which takes place in a tremendous city-fortress based on the Steam Punk universe. My tasks on the Grim Steam project included game design, level design and sound design. I mostly enjoy building levels on the Unreal Editors 3 and 4 and Cry Engine 2's Sandbox Editor but I used other editors such as Hammer and GtkRadiant.





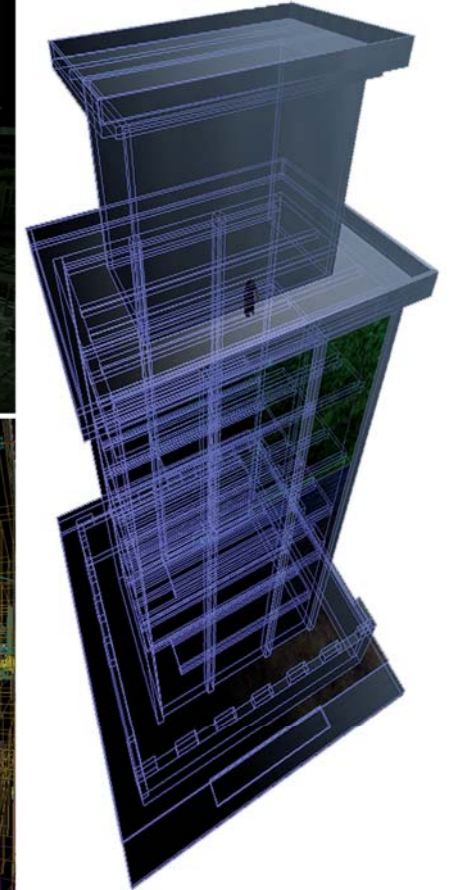
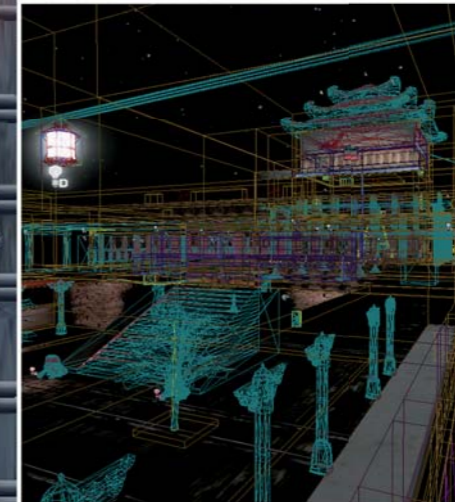
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## GRÉG BENAZECH

### Level/Game Design

Sharp gamer since the MSX card to the Blu-Ray of Playstation 3, I am passionate about video games and possess a fair knowledge on urban culture. Concerning my job experience, my Technologically advanced living room allows me to join my guitar hero and Sayan Warrior jobs together. My interest for gaming and animation offered me the opportunity to work All over the World of Video Games as an MC for Radio-France and Micromania Games Show. The broadcast TV projects helped me develop my Receptivity and sensibility to art direction, conception and entertaining.

Developing fun and different gameplays that appeal to the young people, women, seniors, red-heads...is the one thing I prefer in my job, as well as planning and creating original Universes thanks to my curiosity and my imagination. The year I spent at Gamagora was very fruitful, enabling me to focus on the development of my Skills on Unreal Editor 2.5 & 3 (China map), CryEngine 2 (Dragon Ball Mod). I am currently working on the Grim Steam project, a mix of FPS and investigation in a steam punk universe. The project's tasks I volunteered for are: gameplay conception, level building and cutscenes direction.





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## FAOUZI BOUGHIDA

### Level/Game Design

The Hanimex SD070 in the 80's created a small revolution in my entertainment world. Nintendo, Amstrad, Sega, Sony, literature and role-playing games continued the fight.

I studied Art History at university which provided me with a large understanding of architecture and visual arts.

After several jobs, the wonderful world of video games became more and more attractive, so I started this new degree.

This last year has been rich with discoveries; I worked on Hammer, Unreal Engine and Cry Engine level editing tools. I also discovered playtest methodologies and studio work environment.

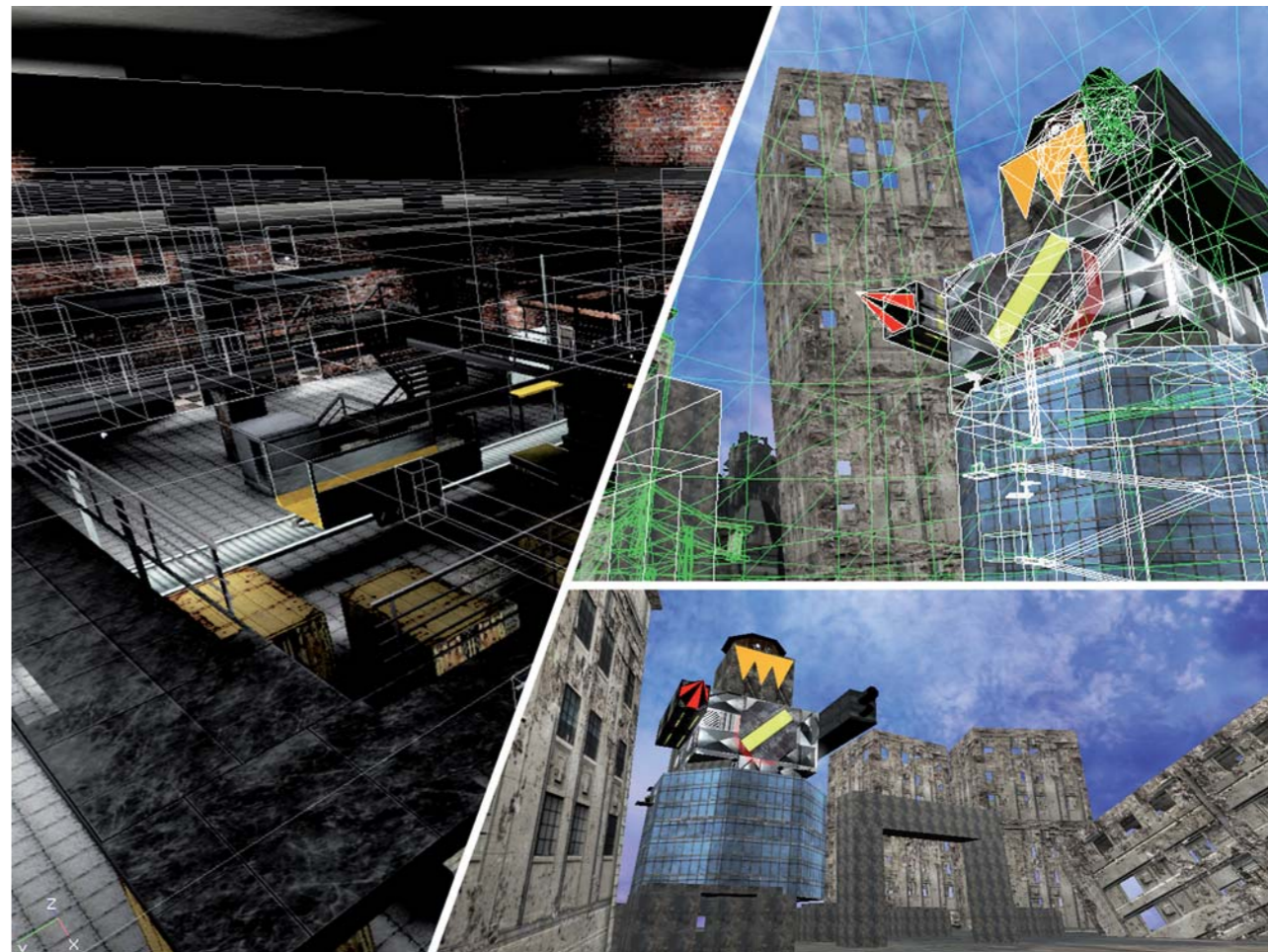
*L'Hanimex SD070 aux débuts des années 80 créa une mini révolution dans mon environnement ludique. Nintendo, Amstrad, Sega et Sony, la littérature et les jeux de rôle continuèrent le combat.*

*La découverte de l'Art m'entraîna sur la voie sinueuse de l'histoire de l'art à l'université. Après plusieurs boulots je me posais en tant que vendeur BD, retrouvant du même coup l'association du graphisme et des histoires.*

*La vente n'étant pas ma tasse de thé, l'attraction pour une formation dans le merveilleux monde du jeu vidéo fut trop forte.*

*Cette année à Gamagora, fut riche en découvertes concrètes, les moteurs de jeu (Unreal Engine, Hammer, Cry Engine), les parties playtests (pour régler la difficulté d'une map), la collaboration avec les différents corps (infographistes et programmeurs).*

*Maintenant, il ne me reste plus qu'à découvrir le métier de level designer au sein d'une entreprise.*





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## SÉBASTIEN CHAUDET

### Level/Game Design

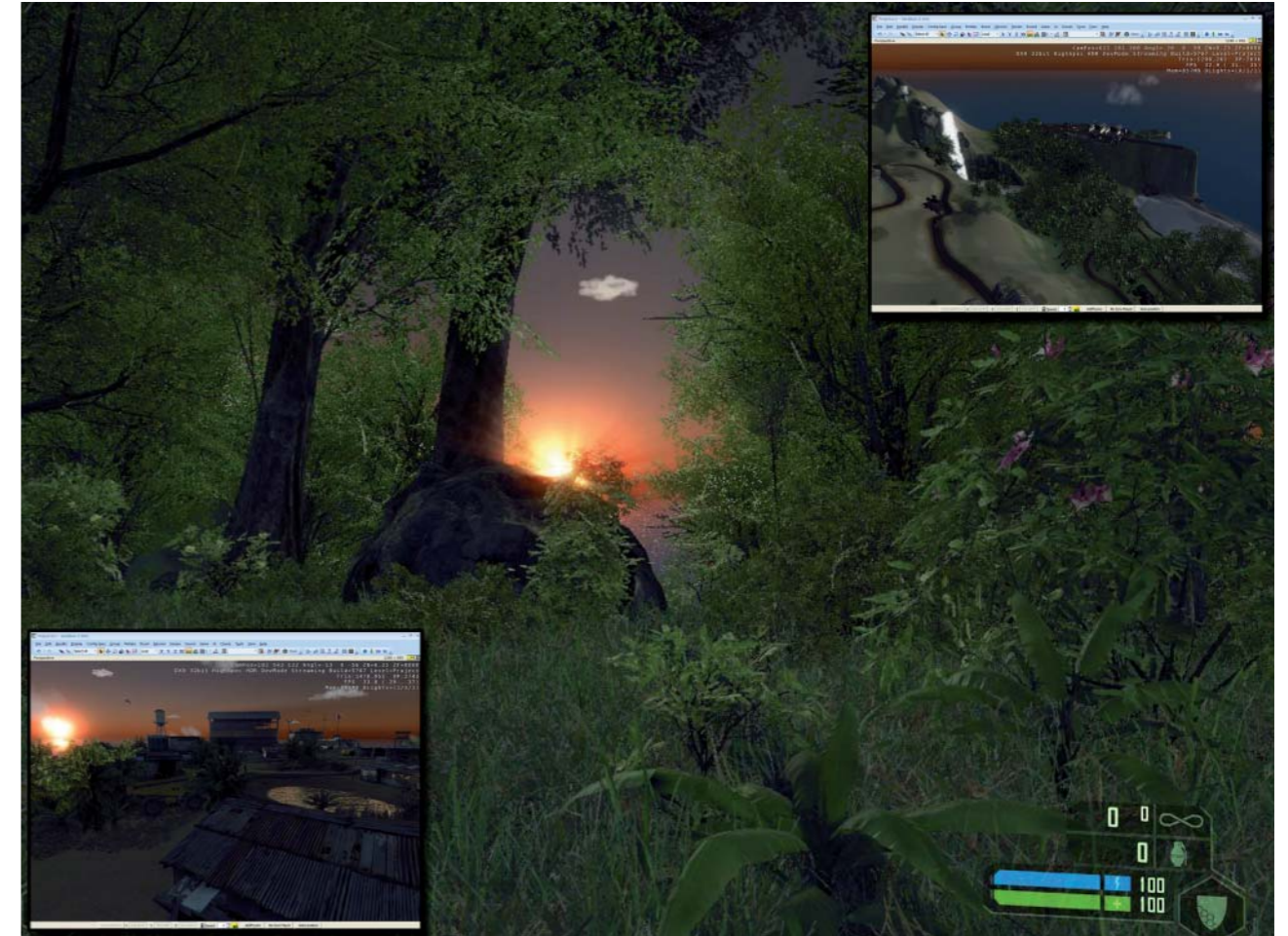
During one year studying at Gamagora, I have had to face many different projects, on various platforms.

One of the most intense experiences was the creation of a totally new Crysis map for the Game Developer Conference (Lyon) in one month, using Sandbox2. I encountered several ordeals making this map. While I was mainly focusing on ground modelling, the first problem was to create an island as realistic as possible. Using my own environmental references, this level design challenge was accomplished in two weeks. Finally, the map provides to the player a rough mountain environment, a compact tropical jungle and a beach on the same island.

I worked on the Unreal engine too. On one hand, I took interest in Splitter Cell : Chaos Theory. It was really exciting to create a multiplayer map for this game, especially due to the specific game mechanics needed to make the map fun for both spy and mercenaries. It took many days of play-test to reach a fine balance in the game. On the other hand, a single player mission for Gears of War has been one of my level design training session. After creating a cool environment, I mainly focused on developing some interesting gameplay sequences using the unreal kismet. I used as many environmental interactions as possible to avoid the tunnel syndrome and let the player feel free.

The last 6 months of the year was dedicated to the creation of a complete game, named Push the Spankers. This fighting game project gave me a chance to carry through a consistent world. The main challenge to overcome was to adjust all the components of the fighting system such as the special attacks variables and movement speed.

I must admit the biggest pleasure of the game & level design was to see all the ideas I could have changing from idea status to in-game fun mechanics.







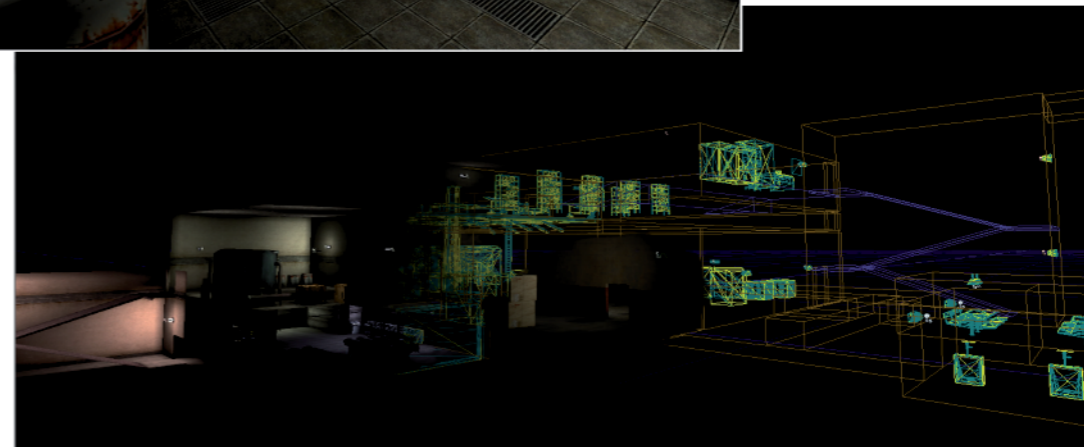
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## MATTHIEU CICA

### Level/Game Design

The Storehouse is a multiplayer map for Splinter Cell: Chaos Theory which I made using the Chaos Theory Editor. It was done in like two weeks during my formation in Gamaroga.

I started this map by a research of architectural patterns of storehouses. So the first design of this map was based on a strong base of considerations like organisation of works, freight traffic, accessibility etc. This was an essential part of the job that enables me to create a realistic and concrete map. The next step was to adapt this map for a multiplayer level, and to take advantage of spy abilities. I had to add news alternative circulations of any kind: trapdoors in the ceiling, ducts, some objects to climb over, dark areas, etc. All the lightings were also adapted to these modifications and gave me some opportunities. The lightings contribute to create new areas in shadows to use for spies, and help the players to find their way thanks to colored feedbacks. The big central part of the map for example is full of scattered boxes that project large shadows. From this area thanks to the color of the light that the player can see the opened doors, anyone knows in what kind of area he can go. The last step was to balance the map well enough to make it fun for both spies and mercenaries. So I had to equilibrate the spaces between the objectives and the spawn camps to make it fair. After a few playtests and many little modifications I finally get a good result: well-balanced, realistic and most of all, fun to play.





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## DAMIEN CIOCCA

### Level/Game Design

#### The Bridge

The Bridge is a single player map for Gears of War, made with Unreal Editor3. It was designed in one month at Gamagora.

I had to use the meshes of Gears of War to create the atmosphere of this map, keeping in mind the original spirit of the game and creating a special environment. I have associated various gameplay areas with a growing level of difficulty while the player walks through the level. The Bridge contains cut-scenes made with the Unreal Engine thanks to the Unreal Editor 3. The level's streaming is efficient all along the progression of the player, unloading the areas where he won't be able to come back, and loading the next areas he will reach in order to optimize the frame rate.

Making this map enough realistic with a strong architectural research was a real challenge. This results in a very concrete and immersive level. I had to study urban plans before drawing my own bridge template on paper. It was also necessary to distort this architectural reality to make the player finding his way easier in the map. I didn't want him to be lost at any time. To reach this goal I used many kinds of feedbacks in all the map : lighting colors changing in accordance with the area's atmosphere, an immersive heavy fog under the bridge, few musics punctuating the key cut-scenes, lots of textures and a considered organization of all the objects according to the areas, a skybox with two well-marked colors, etc.

The beginning of the map is made in such a way that the player is instantly taken by the action and next some more calm sequences happen regularly to let the player breathes, giving to the game a strong rythm.





# GRÉGOIRE CLÉMENÇON

## Level/Game Design

As an individual, I am inventive and dynamic and I have always had the desire to elaborate exciting and innovating concepts for video games. In order to really grasp the technical then artistic sides of this media, I passed a D.U.T. Informatique (option Imagerie Numérique) and a Professional Degree T.A.I.S. (Techniques and Activities of Image and Sound) where I was top honors.

While following these two trainings I was the level-designer of a voluntary studio called "Yssalis" which is presently working on the playable demo of a PC game called "AYAL" (www.ayal-lejeu.com). This gave me the opportunity to experiment teamwork along with its advantages and difficulties.

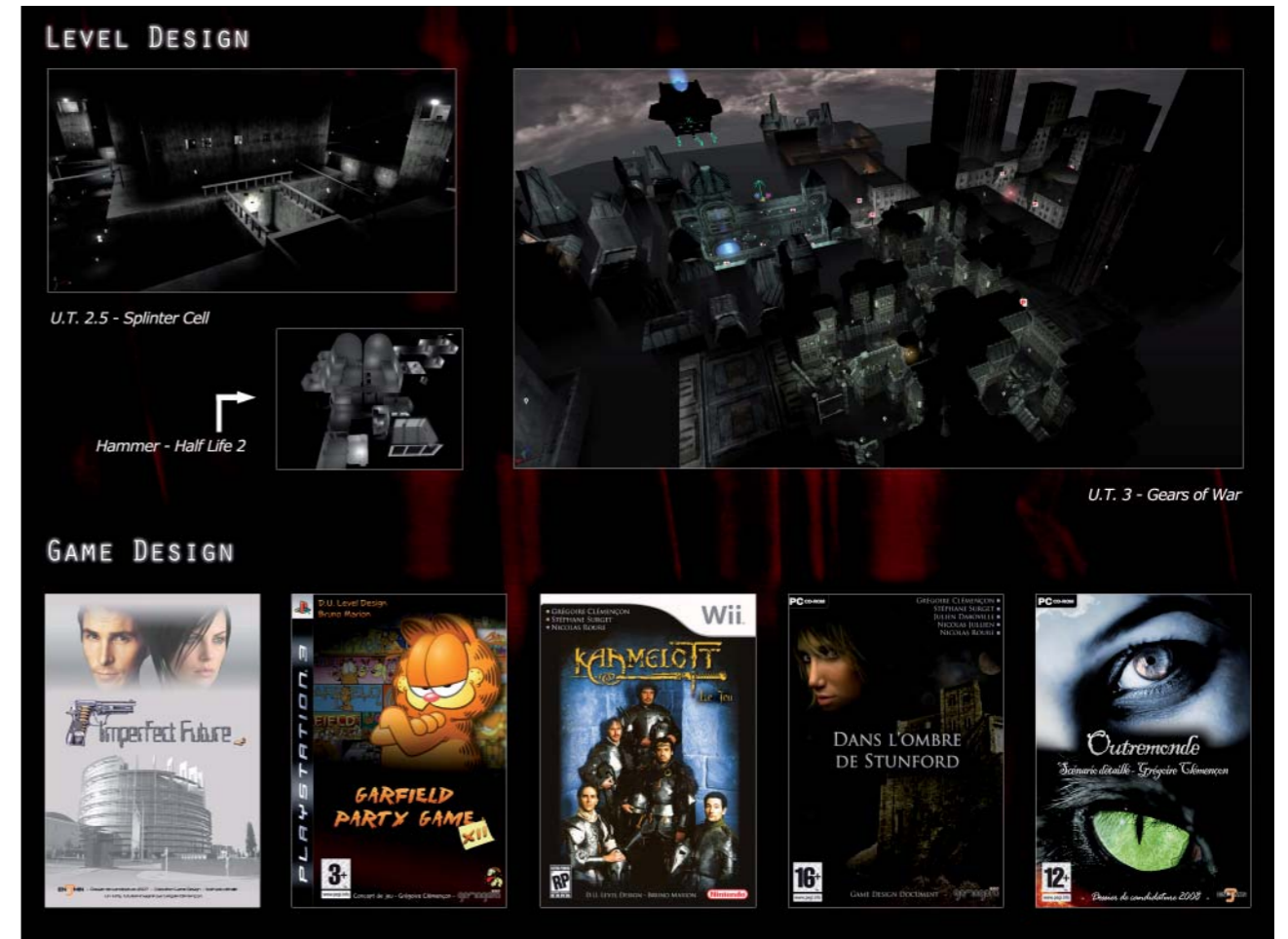
Afterwards I acquired a D.U. in Level Design at Gamagora in Lyon to validate the experience acquired in Yssalis studio but also to have an approach to game design. In that way I was able to realize numerous game concepts and also maps for solo play or multiplayer. The visual side and the layout of the documents I work on are extremely important for me because these must be appealing to the buyer and pleasant to read.

I was also appointed person in charge of the project regarding the game model to be realized in team at the end of the degree course. I therefore have quite an experience of production management. I am well-organized, responsible and have the ability to work in a fast-paced environment. My technical and artistic qualifications allow me to be in tune with the graphic designers and the game developers within a project.

In future I wish to work in the professional environment as a level or game designer. In the long term I aim at being a game designer for these matches my expectations in a better way as regards artistic creation.

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## JULIEN DABOVILLE

### Level/Game Design

As a level designer, my vision of video games insists on the creation of realistic environments in coherence with existing architectural models, which obey to the same physical constraints. The study of architecture and Art history makes possible to reflect better space, circulation and aesthetics of a level. It brings a real credibility to virtual world and facilitates the player's immersion.

The conception of an innovative, coherent, non repetitive gameplay and diverting the occasional player is the center of my reflexion as a game designer. A gameplay must be simple to understand but give enough freedom to permit the player to truly "incarnate" his character. I regard myself as an architect of a virtual world whose coherence and rules find their reflection in the real world... with as many exceptions the fantasy of the game requires!

I wanted to apply this vision for a map, build with UnrealEd 4 during three weeks. Destination: the Propylea of Athens at the time of its splendour (slightly modified for gameplay reasons). The gameplay insists on a variety of situations: many different gunfights, a boss to conclude each action time and the discovery of the level as an integral part of the gameplay. The whole level zones will have to be crossed in order to finish it and to have the production fully used. Thus, the player has a real impression of freedom in the walkthrough thanks to the open architecture of the monument, but the action obliges him to follow a guided route. Cut-scenes help to better understand the game sequences and the walkthrough. Ancient aesthetics, darkness and smoke reinforce the tress and immersion in the heart of this level.





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## MARCUS GLIESCHE

### Level/Game Design

As a game designer I constantly focus on balancing gameplay and plausibility, attack and defence, and on unit values. These thoughts and intensive testing appear in my work on Cold War Crisis, a mod for Command and Conquer Generals. The main purpose is about a balance of overall forces, precise tactics and extended usability of each unit, knowing that every unit featured has to respect real life characteristics in the limits of the game engine and gameplay consequences.

As a level designer my vision tends to elaborate plausible environments and gameplay schematics in the goal of creating pleasure for both casual and hard core gamers. In order to complete the map I used visual and geographic references to help the player understand the map's system. On a Splinter Cell Chaos Theory multiplayer map the two opposing forces have an opposite gameplay and point of view, meaning that the balancing issues are more elaborated than in other games.

I focused on the space dimensional aspect, the spies working on vertical movements and dark areas, the mercenaries working on horizontal movements and hot spots surveillance.

Colour codes in the lights used clockwise for the objective's zones (yellow, orange, red and violet) helps the player understand in which part of the map they are, white lights indicating neutral spots and blue lights both opponent's spawn zones.

The spies can appear unnoticed from the map's corners and the mercenary's HQ located in the middle of the map permits surveillance and faster ammo reload when moving back and forth from one end to another of the map.

The map is intended to use hit and run tactics for the mercenaries, fast runaways and hideouts for the spies in a stressful and intense hide and seek map.

I also made my map easy to modify, in the mind to optimise it easily after play tests.





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## JEAN-FRANÇOIS HERVÉ

### Level/Game Design

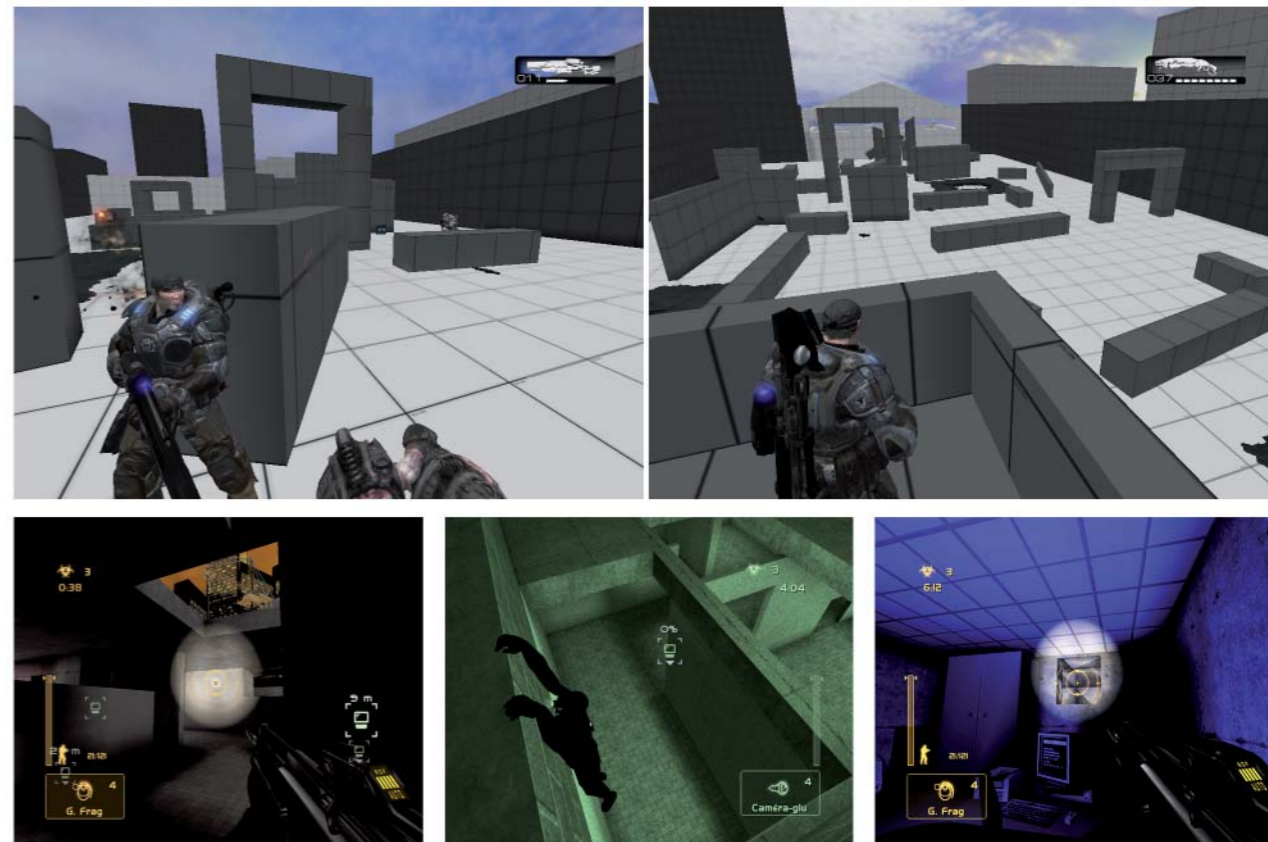
During six months of course, I used several game editors: Hammer, Sandbox 2, Unreal Editor (2.5 and 3). The major exercises were to realize a scripted single player map for Gears Of War and a multiplayer map for Splinter Cell Chaos Theory.

#### RUINED ARENA

This single player map for Gears Of War was made in a few weeks. The goal was to create ten minutes of gameplay with different sequences. I decided not to use any of the visual objects. So I created the whole map using basic textures and shapes and I focused on the gameplay. The player has to go through the battlefield and defeat enemies in order to free his allies. I created three sequences with three different types of gameplay: a huge fight in an arena, some other fights in a building and a sequence of infiltration. The result is a great nervous fighting level.

#### CHANTIER

Chantier is a multiplayer map for Splinter Cell Chaos Theory. In this game, two teams fight each other, the spies and the mercenaries. The spies try to hack computers and the mercenaries defend. Designing the level, the challenge for me was to think about the two ways of playing in the game: the first person shooter side and the infiltration side. The level takes place in a construction site which hides a clandestine laboratory in its basement. I wanted to create two atmospheres, one with wide open spaces and the other with dark cramped spaces with lots of hiding places for the spies. So, the map is diversified, but still well-balanced and fair for the two teams, and I am proud of it.





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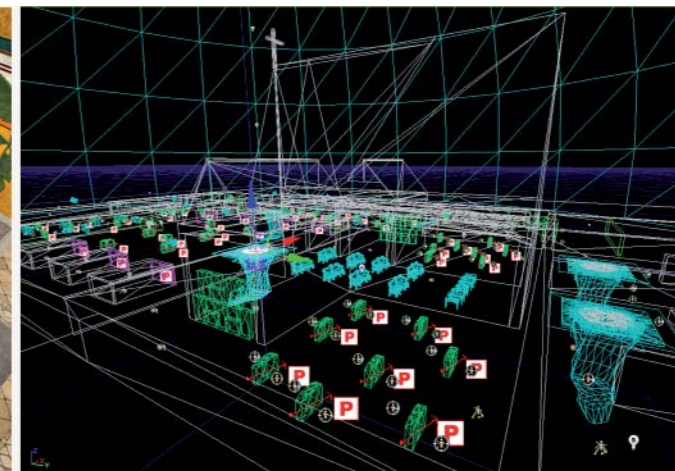
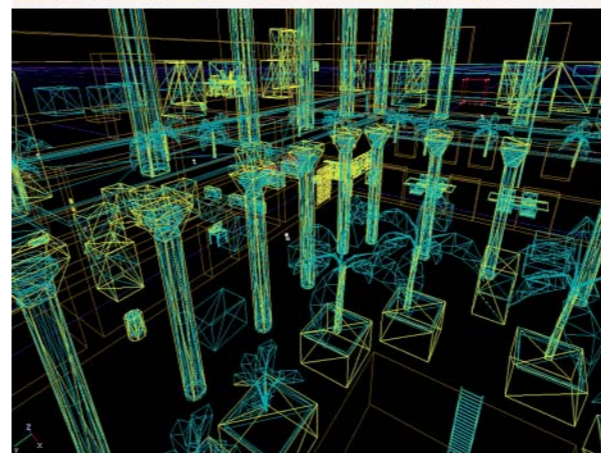
## SYLVAIN JUSSSELME

### Level/Game Design

Avid gamer and roleplayer for as long as i can remember, it was natural for me to chose to have a career in video games. I have a particular interest on the making of gameplay elements and my previous experiences in pen and paper roleplaying games led me to write scenarios. Furthermore during my year studying Level Design at school, I acquired solid bases in architecture and environment design. Keeping all this knowledge I gathered in mind, I do my best to build interesting and immersive levels for the players. I also learned to work with level editors such as the Unreal Editors 3 and 4, Sandbox 2 and Hammer to name a few. As a final school project, I worked on "Grim Steam" a total conversion mod for UT3 as a Game Designer, Level Designer and Sound Designer. I also have a decent knowledge of scripting languages such as LUA.

Gamer et rôliste invétéré depuis mon plus jeune âge, c'est tout naturellement que j'ai choisit de faire des jeux vidéos mon métier. Mon intérêt se porte plus précisément sur la conception de règles et de gameplay et mon passif dans le jeu de rôle m'a souvent amené à écrire des scénarios, de plus durant mon année d'étude en Level Design, j'ai acquit de solides bases en architecture, et en conception d'environnement. Fort de toutes ces connaissances, je m'emploie à les utiliser afin de rendre mes niveaux et mes cartes plus immersives et plus intéressantes pour le joueur. J'ai aussi appris à travailler avec des éditeurs de niveaux comme le UnrealEngine, le CryEngine et Hammer pour n'en citer que quelques uns. Dans le cadre d'un projet de fin d'étude, je travaille actuellement sur « Grimsteam », un mode total conversion solo de UT3, en tant que Game designer, Level designer et Sound Designer. Je possède aussi des connaissances dans les langages de script comme le LUA par exemple.

En Haut à Gauche : Ryad Al Lulu Map Multijoueur Splinter Cell Chaos Theory vue unlight.  
En Bas à Gauche : Ryad Al Lulu Map Multijoueur Splinter Cell Chaos Theory vue wireframe.  
En Haut à Droite : Locuste May Cry Map Solo Gears Of War vue wireframe.  
En Bas à Droite : Locuste May Cry Map Solo Gears Of War vue unlit.





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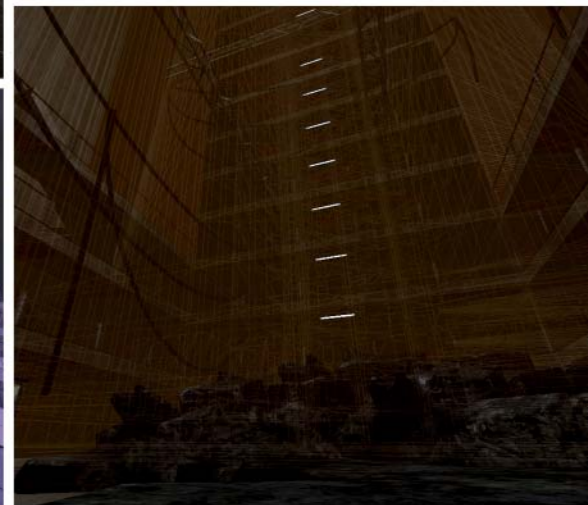
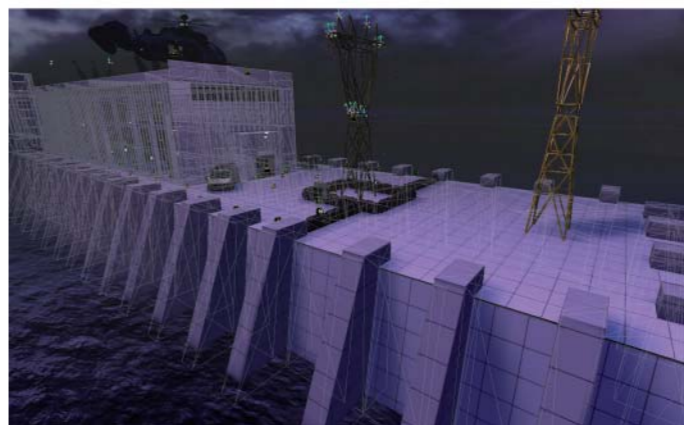
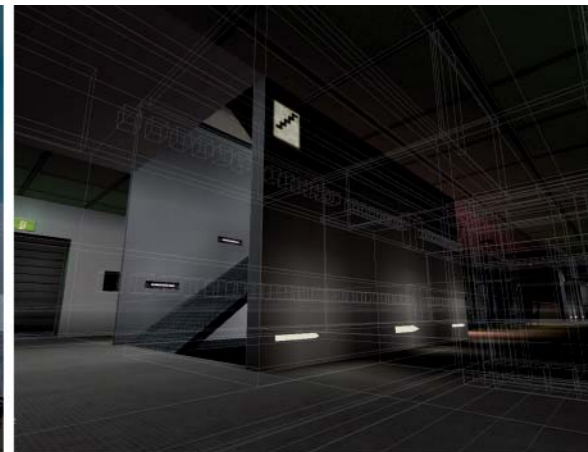
<http://glen.martin.free.fr>

## GLEN MARTIN

### Level/Game Design

I've always dreamed about making video games since I played Pitfall in the early 80's. As an environmental and lighting designer, I already had a comfortable experience in architectural design and with 3D packages. I started this new degree with one thing in mind: exploring and learning new tools to create interactive levels for the game industry. During the course of my studies, I've learned to work with UnrealED and Hammer editors to name a few. I personally focus on level architecture and internal mechanics to make maps as immersive as possible. From blocking out BSP at the beginning of the production to lighting and polishing, I'm constantly refining the game path until it's ready to ship. I'm also familiar with in-game scripting which provides new interactions for the players through custom gameplay elements.

From upper left to lower right: Hammer, single player map for Half life 2 - "The prison", UnrealED 3 multiplayer map for SplinterCell Chaos Theory - "Airbus A380", UnrealED 4 single player map for Gears of War - "The power plant", UnrealED 4 single player total conversion mod for Unreal Tournament 3 - "Grim Steam" - work in progress.







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## NICOLAS ROURE

### Level/Game Design

These pictures are extracted from the game Tom Clancy's Splinter Cell Chaos Theory. Its gameplay has two main aspects: a solo part in which a spy has to infiltrate various buildings to complete his missions, and a multiplayer one in which many players, represented by spies and mercenaries, are confronted. Last winter, one of our exercises was to create a level of this game. An experienced level designer from Ubisoft supervised our work.

In my map, the spies have to hack computers in a huge villa. The mercenaries must defend the building against them. This kind of scenario allows me to create various situations of gameplay, located in places: a strange garden which is a mix of labyrinth and religious place, a massive house with two floors, and a small terrace with a swimming pool, and a small house.

These places are all linked so that the players can move between them. The pace of the action is faster thanks to that. Considering that the spies are weaker than the mercenaries, a few paths can't be used by mercenaries (for example roofs, airducts, or false ceilings). Whether you play a spy or a mercenary, the difficulty has to be well balanced. That major stake requires a lot of playtests.

Four computers are hidden in the villa. The spies have ten minutes to hack three of them to win the game. If a spy is killed more than three times by a mercenary, the player who controls him loses the game. The players who control the mercenaries win if they kill the two spies, or if they prevent at least two computers from being hacked during ten minutes.

The environment of the map has to describe an original atmosphere. This dark villa is only lightened by the moon. The garden reveals a weird architecture. Exotic plants bring a wild aspect to the villa.





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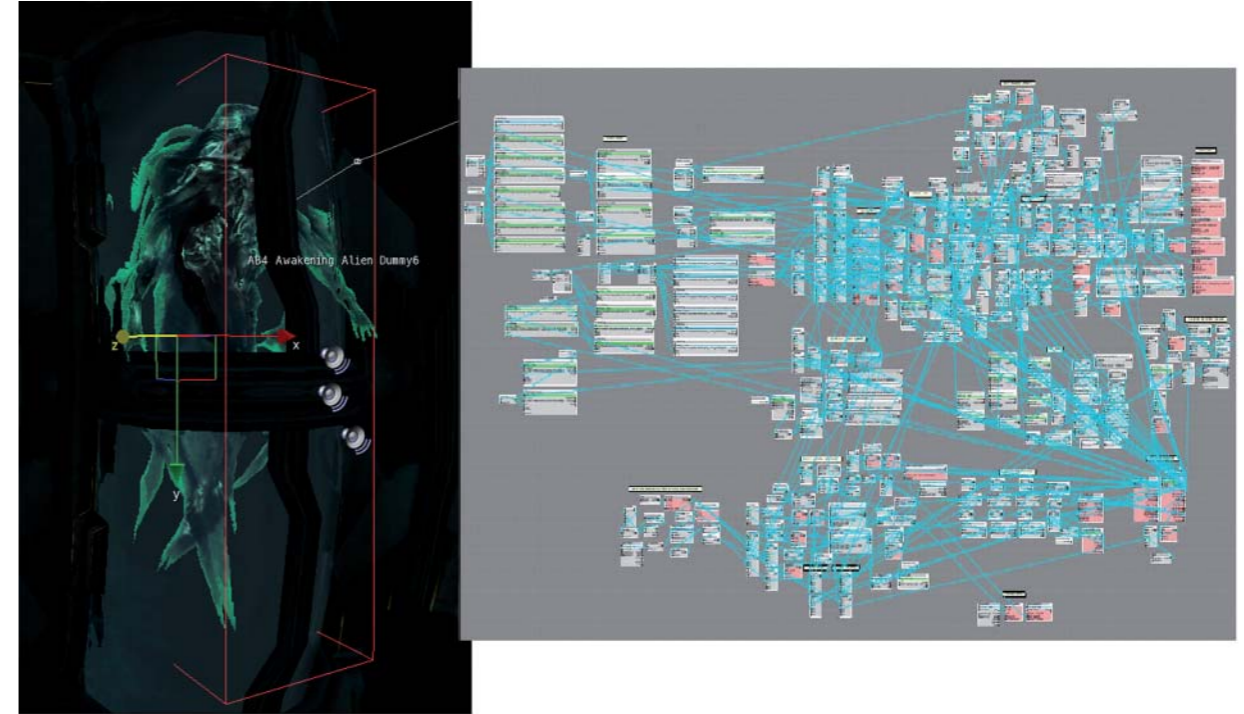
## FABIEN SEROT

### Level/Game Design

#### AI behaviour

During our one year formation at Gamagora we worked on the SandBox2© editor and created a map for the AAA title Crysis. During the process of creation I focused myself on AI behaviour. In my opinion, a good AI is an important part of the success of a FPS. The more realistic the Ai is and the more fun the game will be. Nowadays players are expecting behaviours close to reality. This will be a full immersion and the player believes he is playing versus Humans on Solo Mode.

The flow graph is a tool which permits to script AI with graphics boxes. It allows you to build complex behaviours very easily. I scripted in a way the AI can choose randomly a behaviour among many. I gave AI two different states (Idle and OnAlert), each state has its own thoughts pattern. If the AI is idle it will patrol around map or smoke a cigarette; if the AI is OnAlert it will call backup, take cover or move in formation. The player will never see the same character doing the same action over and over. The game will stay fun even after a few hours of playing which for me is the main goal for a Game Designer.





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## STEPHANE SURGET

### Level/Game Design

Splinter Cell Chaos Theory – Versus  
The Smuggling Freighter

In the course of my training at Gamagora, I had to create a multiplayer map for Splinter Cell Chaos Theory. This work was supervised by a level designer from Ubisoft who had conceived maps for the final version of the game.

In order to make an original map, I launched into a concept which had not been made for this game yet: a boat. It required me to fully understand necessities and constraints of the specific gameplay in Splinter Cell, for example alternative paths, objectives, etc.

The final outcome, a smuggling freighter, is satisfactory. The ship is composed of three «arenas»: there are two decks consisting of the cargo for the first and the machinery for the second. The central part is the life area, hosting rooms, wheelhouse, kitchen and meeting room done up by the mafia.

Circulation is made outwardly via footbridges, as well as insidly via staircases. The spies can hide themselves in holds, creep in ventilation or climb posts linking up decks.

The gameplay is nervous and balanced; the map received good criticisms from the playtesters.





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## JOHN BORG

### Prog et Dev

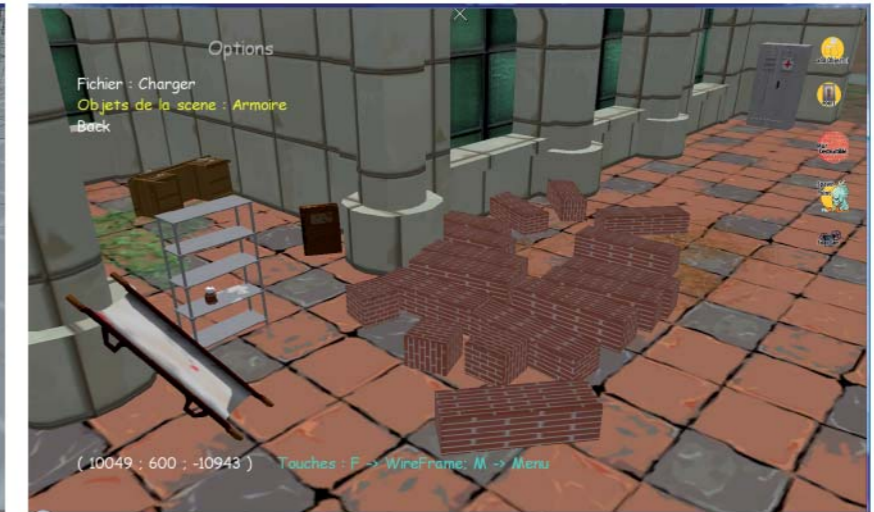
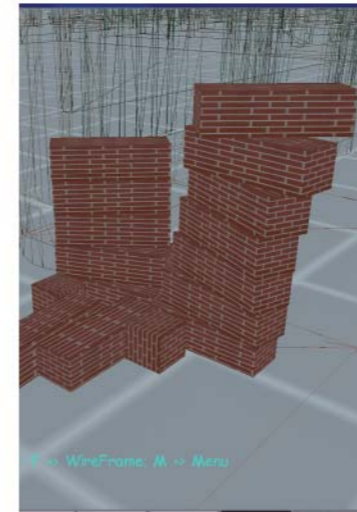
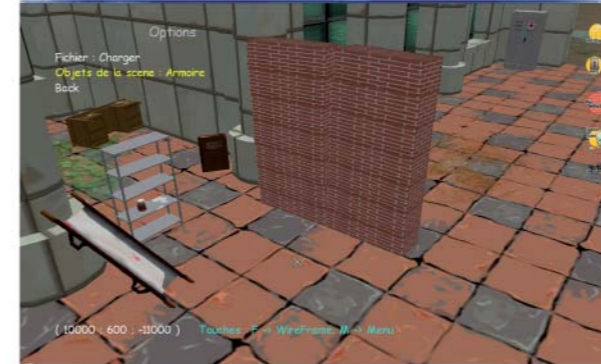
2007 – 2008 Postgraduate degree in programming (1 year) following my master  
2006 – 2007 Master's degree in computing

JAVA and TCL programmer (at REEL, April 2004 to August 2006)  
Web programmer (Php/MySQL and AJAX) at MyDistribution (Internship, May to August 2007)  
Web programmer (Flash/AS) at Néology (August 2007)  
JAVA programmer (Dyade/Dicom, September to October 2007)

Master achievement (University of Lyon, April to September 2008) : Till Death Do us Part project  
I am developing a multiplayer online game for PC and X-Box 360. (a C#/XNA soft) It's a kind of survival horror, the human team have to fight against zombies and other monsters. The gameplay is focused more on cooperation than the traditional game. Players have to interact and play together.

At the moment, I am preparing a level editor. The tool allows the game designer :  
to load a map build with Hammer  
to load Maya objects and change their positions  
to create interactions between the heroes and the scene objects  
I also develop monster's AI and I implement bullet physic SDK.

Others Achievement  
JSP applications :  
Product Lifecycle Manager  
Oracle documents search engine  
Full flash website [www.Artebat.net](http://www.Artebat.net) (Flash/Action Script)  
Creloaded website [www.NodShop.fr](http://www.NodShop.fr) (Php/MySQL et Ajax)  
Website [www.EspFrance.com](http://www.EspFrance.com) (Php/MySQL)





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## ALEXANDRE BRISSAC

### Prog et Dev

Grim Steam est un hybride entre un First Person Shooter et un jeu d'enquête développé avec Unreal Engine 3 dans le cadre du projet de fin d'année de notre formation Gamagora. Dans le jeu, l'une des particularités du héros est de posséder un monocle lui permettant d'utiliser différentes visions pour l'aider dans son enquête.

Mon travail, en temps que programmeur, a été de fournir aux level designers un moyen d'appliquer et de paramétrer les différentes visions dans l'éditeur de niveau. Par exemple, pour la vision thermique, chaque objet devait être entièrement configurable pour agir différemment lors de l'activation de la vision. La température, sous forme d'une valeur ou d'une thermal map, et la visibilité pendant la vision étaient autant d'éléments paramétrables dans l'éditeur.

Ce projet a été l'occasion de m'initier et d'apprendre à utiliser l'Unreal Engine 3, l'un des moteurs/éditeurs les plus utilisés à l'heure actuelle dans le secteur du jeu vidéo.

Mon Profil : J'ai effectué mes études à l'université des Sciences de Montpellier, France en IUP Génie Mathématique et Informatique pendant 3 ans avant de venir en Master 2 à Gamagora. Je suis intéressé par un poste dans la programmation moteur bas niveau ainsi que la programmation gameplay.





## BORIS BRUGEVIN

### Prog et Dev

Génération de surfaces implicites sur GPU

Les APIs de développement 3D sont en innovation constante. C'est notamment le cas de la librairie de Microsoft : DirectX qui en est à sa 10ème version. Étant passionné par l'imagerie numérique depuis le début de mes études, je suis toujours au courant des dernières nouveautés dans ce domaine.

La puissance de cette nouvelle version est due à l'apparition d'un nouveau shader : « Geometry Shader » et de la nouvelle sortie des données grâce au « Stream Output ». J'ai pu réaliser un programme utilisant pleinement cette nouvelle technologie en implémentant une application temps réel de génération de surfaces implicites sur le GPU.

Afin d'augmenter le réalisme des jeux vidéo, les programmeurs recherchent constamment des nouvelles techniques de rendu. C'est le cas pour représenter des surfaces visqueuses telles que l'eau ou la lave.

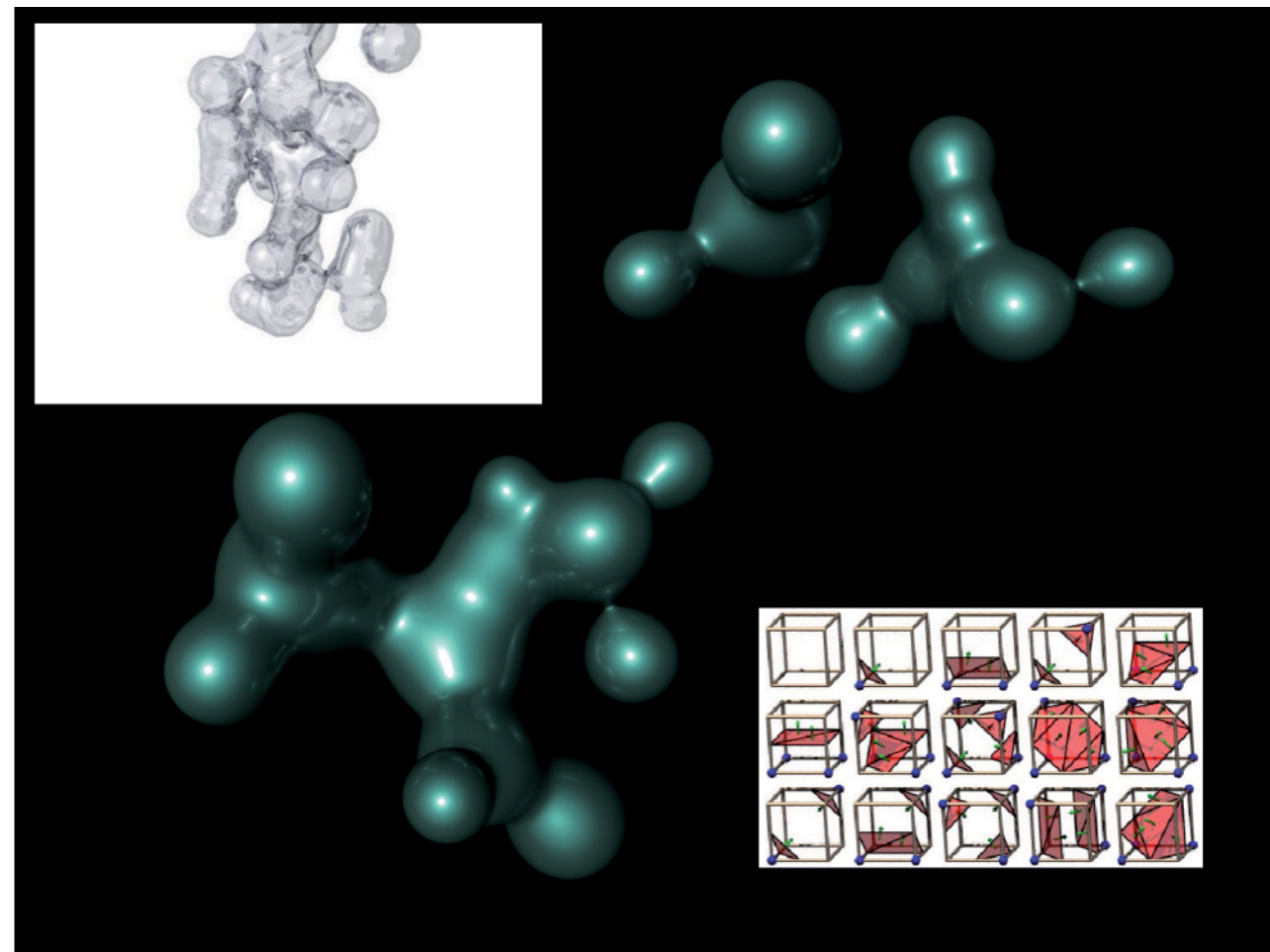
Différentes techniques sont possibles, mais obtenir une simulation en temps réel n'est pas chose aisée. Grâce au nouveau modèle de shader (4.0), des techniques déjà connues et réalisables en software sont maintenant réalisables en hardware, donc sur le processeur graphique.

J'ai implémenté intégralement la technique du « Marching Cubes » sur GPU. Cet algorithme peut être parallélisé et donc portable sur processeur graphique. Celui-ci consiste à subdiviser l'espace en cubes et à créer des triangles à la volée dans chacun de ceux-ci afin de produire l'isosurface.

Le rendu obtenu est convainquant et rapide à exécuter. DirectX 10 ouvre de nouveaux horizons et permet de réaliser des effets réalistes tout en gardant un débit d'images par seconde élevé.

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## RÉGIS CAJET

### Prog et Dev

Editeur de ville :

Développé en c++, cet outil fonctionnant sous Direct3D et OpenGL permet de créer des villes en assemblant plusieurs objets. Un exporteur permet de récupérer cette scène en format xml afin de l'importer dans un moteur 3D.

Moteur 3D 'Systemic-Engine' :

Développé en c++, ce moteur fonctionne sous Direct3D ou OpenGL. Il gère les Shaders et Effects CG, le bump mapping et le parallax mapping. Il est optimisé pour la génération de terrains grâce à la création de Quad tree, Octree, Kdtree et Level of details.

Jeu Vidéo 'MFA' :

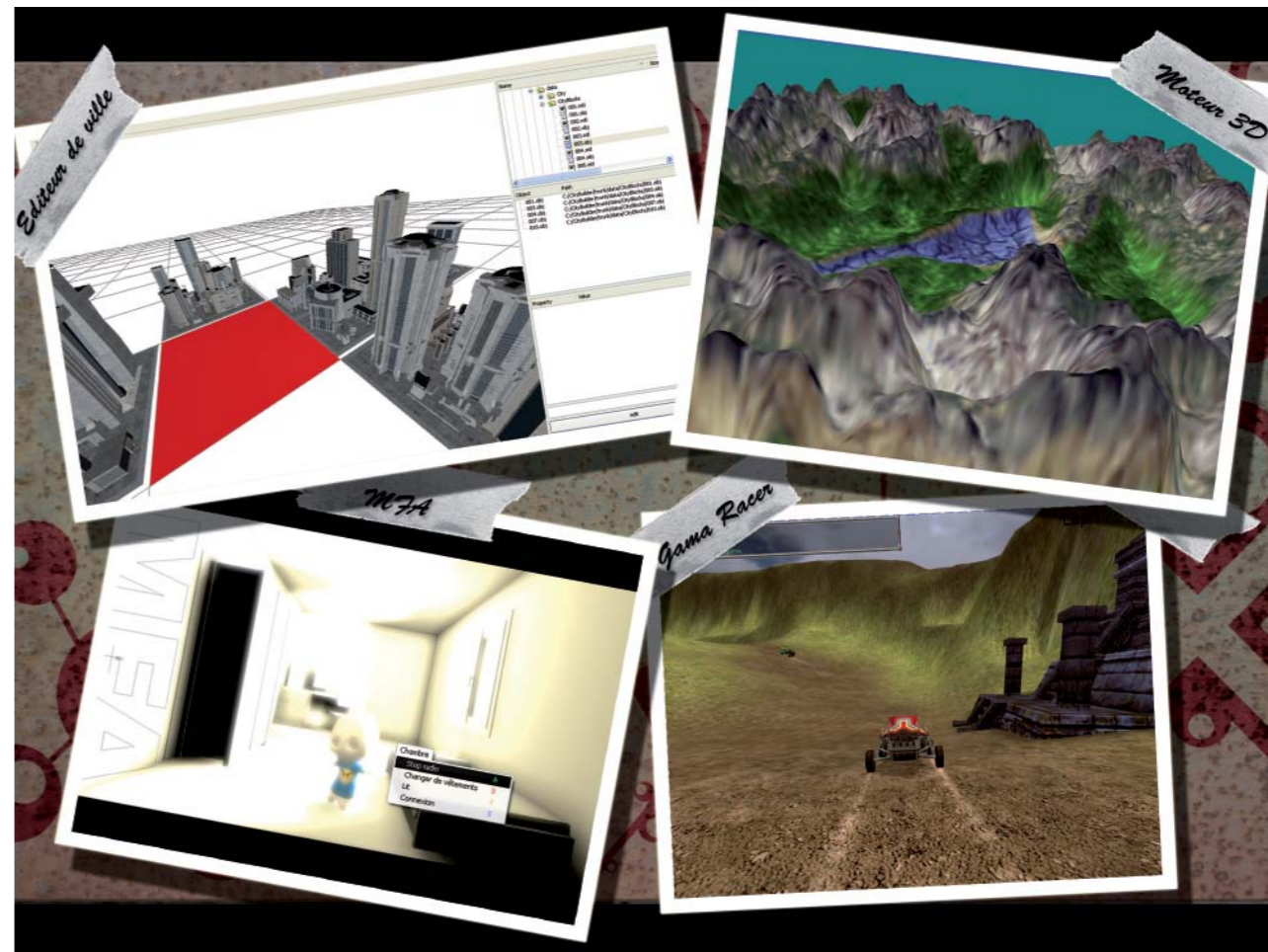
MFA est un projet personnel de jeu vidéo. Il place le joueur dans un univers caractérisé par une ambiance visuelle particulière. (Peu de textures et effet de glow). J'ai été chargé du gameplay du jeu et des interactions avec les objets et les décors.

Jeu Vidéo 'GamaRacer' :

GamaRacer est un projet de jeu vidéo créé en 2 semaines durant ma formation en Master 2 Programmation & Développement de jeux vidéo (Gamagora) à partir du moteur 3D 'Torque 3D' afin d'être présenté lors de la Game Developer Conference 2008 à Lyon.

Mon profil :

Suite à mon Master 2 Programmation & Développement de jeux vidéo (Gamagora), je souhaiterais travailler en Programmation Gameplay, Recherche & Développement ou Développement d'outils d'éditeurs.





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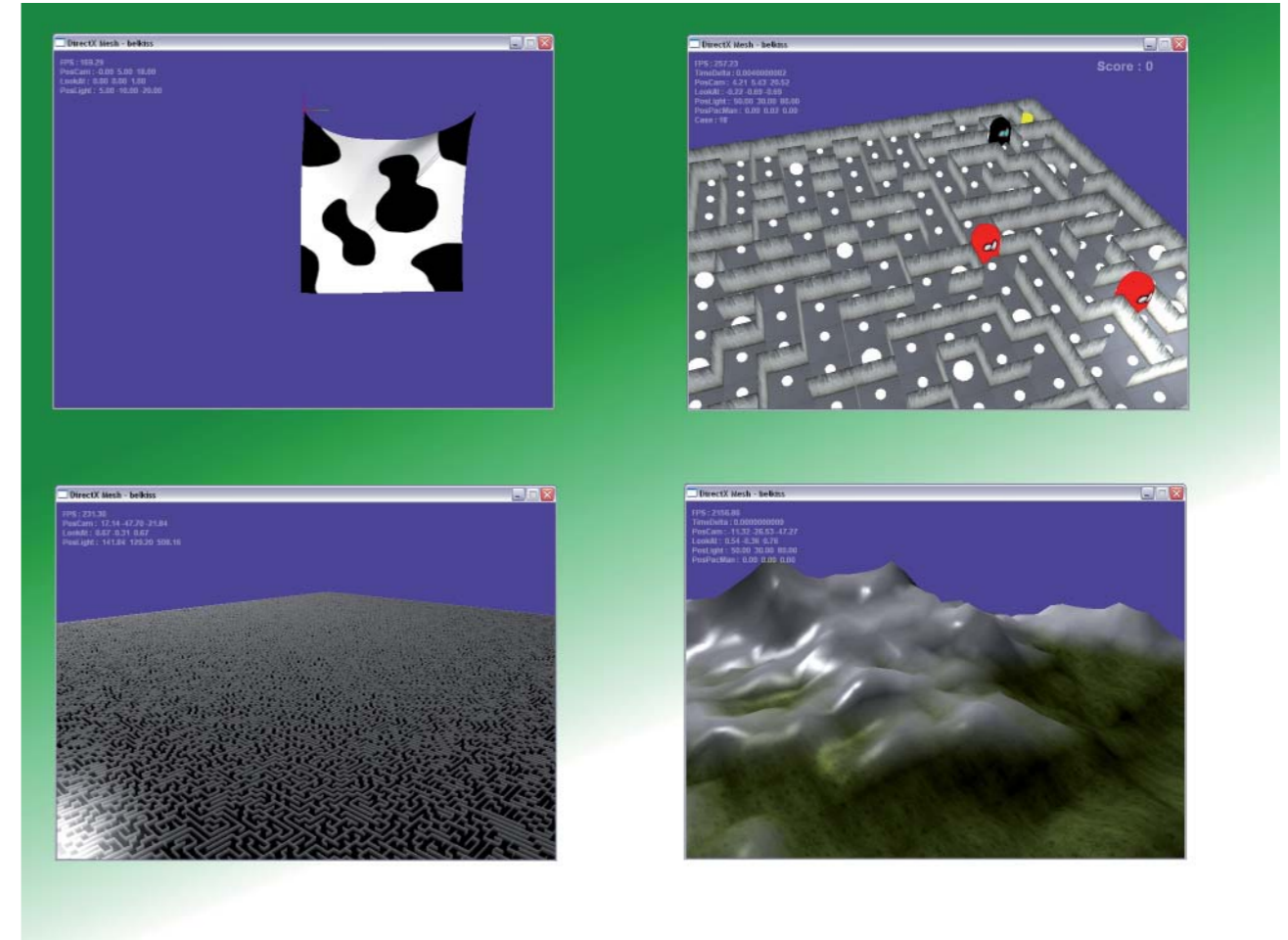
## LAMBERT CLARA

### Prog et Dev

Gamagora allowed me to fully understand the requirements of game development. I have been working on a lot of small projects, as you can see some clothes physics, with two attachment points and wind blowing.

I also created a maze generator program, which was reused for the creation of a pacman-like game. The basic enemy behaviour is to walk through the maze randomly, his color is red. The color of the enemy changes as he has spotted the player and is chasing him, then he turns black. When the pacman eats a big pill, he becomes the hunter, the behaviour of the ghost is now to run away from the player while his color is blue.

The last project pictured is a ground generator program, with a smooth filter for the edges. I am currently looking for a job in computer graphics programming, gameplay or engine development. I am also a big supporter of Linux so I'm available for jobs in IT consulting dedicated to open source.







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## AURÉLIEN JUSSSELME

### Prog et Dev

The video game is the only sector of ITs that mixes so many fields I appreciate and practiced during my studies: programming, mathematics and physics, 3D graphics and imaging synthesis, and music. This makes me pleased about experimentations on 3D display techniques, and their optimization methods.

I programmed my first true 3D engine structure using DirectX and C#. The creation of HLSL shaders fascinated me because it involves many notions of linear algebra and optical physic. I wanted to create a tool simple to use without major changes in the code, with settings as complete as possible, particularly on lighting. My engine incorporates usual shaders: Phong lighting, Bump-Mapping, Parallax-Mapping, Relief-Mapping and Cell-Shading. Everyone includes up to 5 lights with shadow-maps, the opportunity to add a cache to draw the form of the light, and two distances to limit its effect. Adding new shaders in the engine can be done by simply overloading a basic class which manages the main data. This was a very good experience to identify the weak point on programming graphics processors.

As a first contact with platform XNA, I adapted this engine for Xbox 360, and added some enhancements and a better management of multi-lighting. I learn from the mistakes that I made on the first version, before to begin the development of the game engine for our student project (also in XNA). I want obtain optimal performance, and incorporate animation techniques, pre-lighting, textures atlas creation...





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<http://projetutopia.blogspot.com>

## ANDREAS LIVET

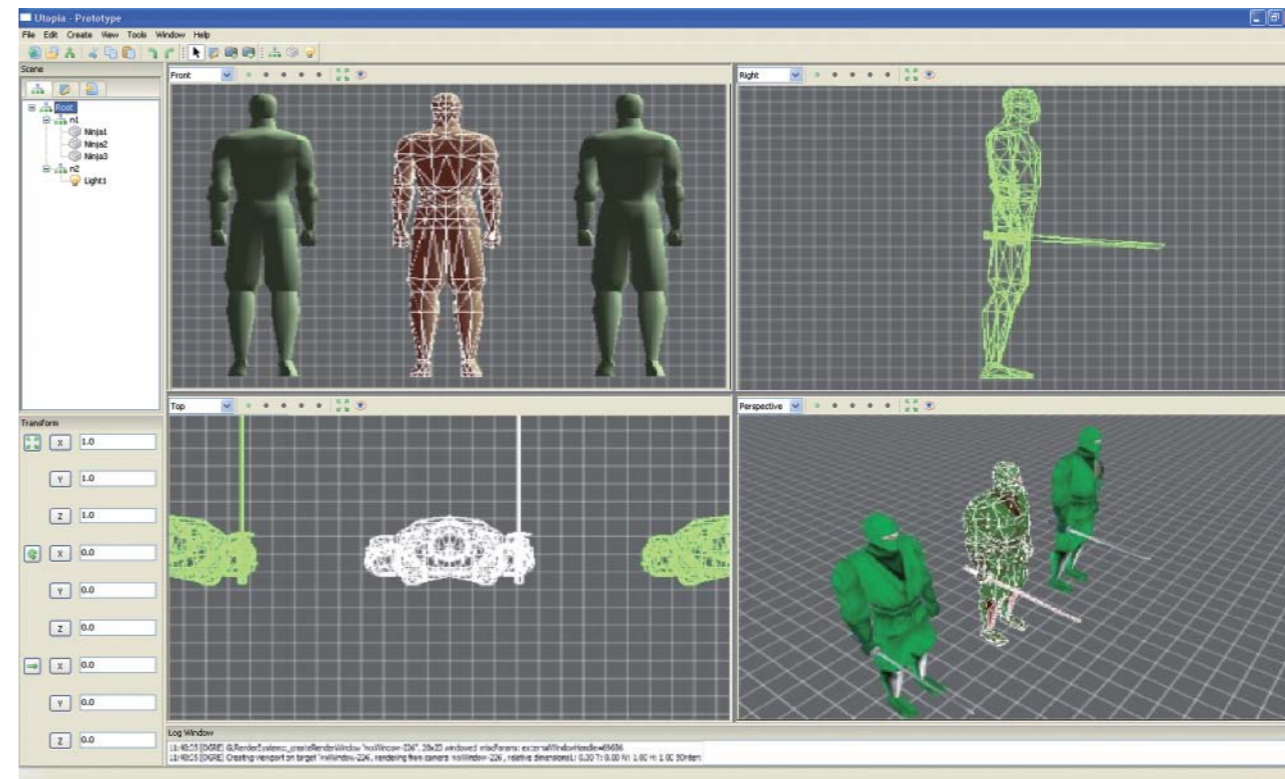
### Prog et Dev

Etant persuadé qu'avec de bons outils l'on fait de bons jeux, je me suis lancé dans le développement d'une plateforme d'aide à la création de jeux vidéo.

Utopia est un projet ambitieux qui rassemble un site internet d'échange de ressources liées au jeu vidéo ainsi qu'un logiciel d'aide à la conception de jeux.

Cela fait maintenant 2 ans que le projet est en préparation. Durant la première année, celle de mon Master 1 en Sciences Cognitives, j'ai développé des concepts ergonomiques innovants permettant de réaliser des interfaces accessibles, évolutives et personnalisables. La deuxième année, celle de mon Master 2 en programmation à Gamagora, j'ai acquis les compétences nécessaires pour développer un moteur de jeu complet : moteur graphique DirectX, moteur physique, moteur réseau, intelligence artificielle, scripting...

Mes compétences tant en Sciences Humaines qu'en programmation de jeux vidéo font donc de moi une personne de premier choix.





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<http://twinklestar.free.fr/site2/>

## GUILLAUME ORTEGA

### Prog et Dev

#### BankaiEngine :

An advanced 3D engine written in C++, with DirectX. It support HLSL Shaders, import/export from 3D Studio Max, Scene Graph, Soft Shadow, Parralax Mapping, Level Of Detail...

#### City Hunter:

A City Editor written in C++. With a Multi API 3D engine: DirectX and OpenGL, which uses CG Shaders. It supports scene serialization and import object in « .obj » format.

#### GamaRacer:

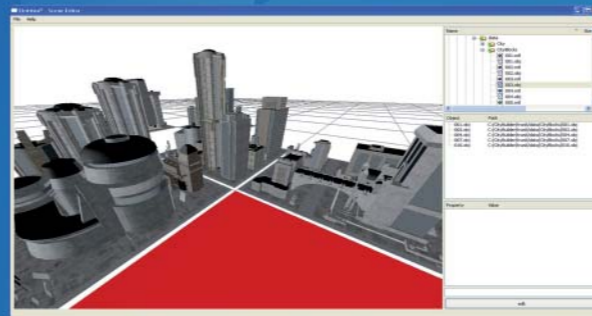
A Racing Game made in two weeks, written with the Torque Advanced Game Engine. I programmed the Car AI and part of the gameplay. The Goal of the project was to introduce Gamagora at the GDC 2008 of Lyon.

#### Neo Twinkle Star Sprites:

A 2D Shooting game, written in Python with SDL. It's been my personal project for a few years. It's a remake of a classic NeoGeo Game "Twinkle Star Sprites", I tried to rewrite it with lots of improvements.

#### My Profile:

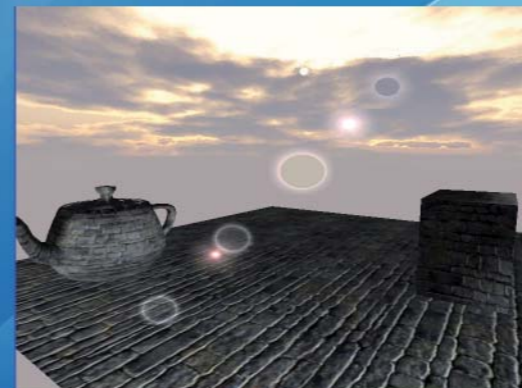
Before Gamagora, I was studying at Polytech'Nice Sophia, a Computer sciences engineering school for 3 years (5 years diploma) and at the IUT of Nice for 2 years (2 years diploma). I am looking for a job in low level development, like engines, R&D, or tools development.



City Hunter



Neo Twinkle Star Sprites



Bankai Engine



GamaRacer



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<http://perrier.remy.free.fr>

## REMY PERRIER

### Prog et Dev

#### WonderWorld :

J'ai participé à la création d'une démo technique pour la GDC en OpenGL . Nous avons mis en place au sein de ce programme différentes fonctionnalités comme des shaders d'eau, un moteur de particule, le lens flare, une génération procédurale d'arbre et de végétation.

#### Bankai Engine :

Cette année de formation m'aura également permis de coder un moteur graphique à l'aide de l'API graphique direct x. Celui-ci comprend un graphe de scène ainsi que le frustum culling. Différents shaders ont été développés comme le normal et le parallax mapping, les soft shadows ... Ce moteur graphique gère l'importation de fichiers .x (animation, shader hlsl).

#### City Hunter :

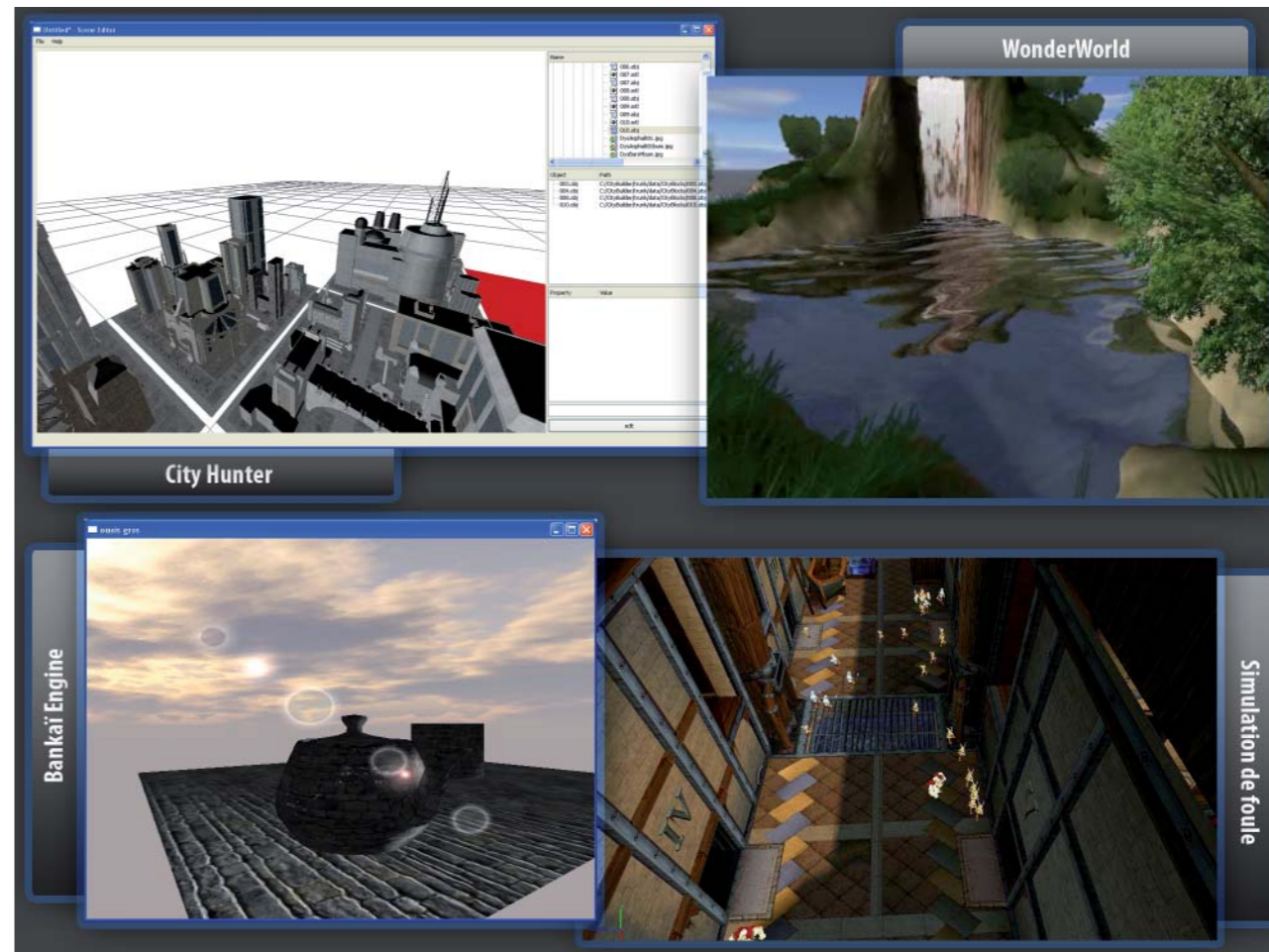
City Hunter est un éditeur de ville. Ce programme permet d'importer et de positionner dans une scène des blocks urbains. Ce projet a été développé à la fois sous l'API graphique direct x et open gl et la librairie graphique QT.

#### Simulation de foule en milieu urbain :

Au cours d'un stage de 4 mois réalisé en 2007 pour la société Etranges libellules, j'ai créé un plug-in pour le moteur de jeu de l'entreprise permettant une simulation de foule en milieu urbain. L'utilisateur a la possibilité via une interface graphique de créer différents types d'agents et de leur attribuer des états en fonction de l'instant de la journée.

#### Profil :

Je souhaiterais travailler dans les jeux vidéo de préférence pour un poste de programmeur moteur, en recherche et développement ou programmeur outils.





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## MAEL QUAISSARD

### Prog et Dev

The next generation of hardware allows to make simulations more and more real. I'd like to develop my knowledge in virtual worlds and especially in the theme of physical effects. The focus of my study is improving virtual realities by the implementation of special effects.

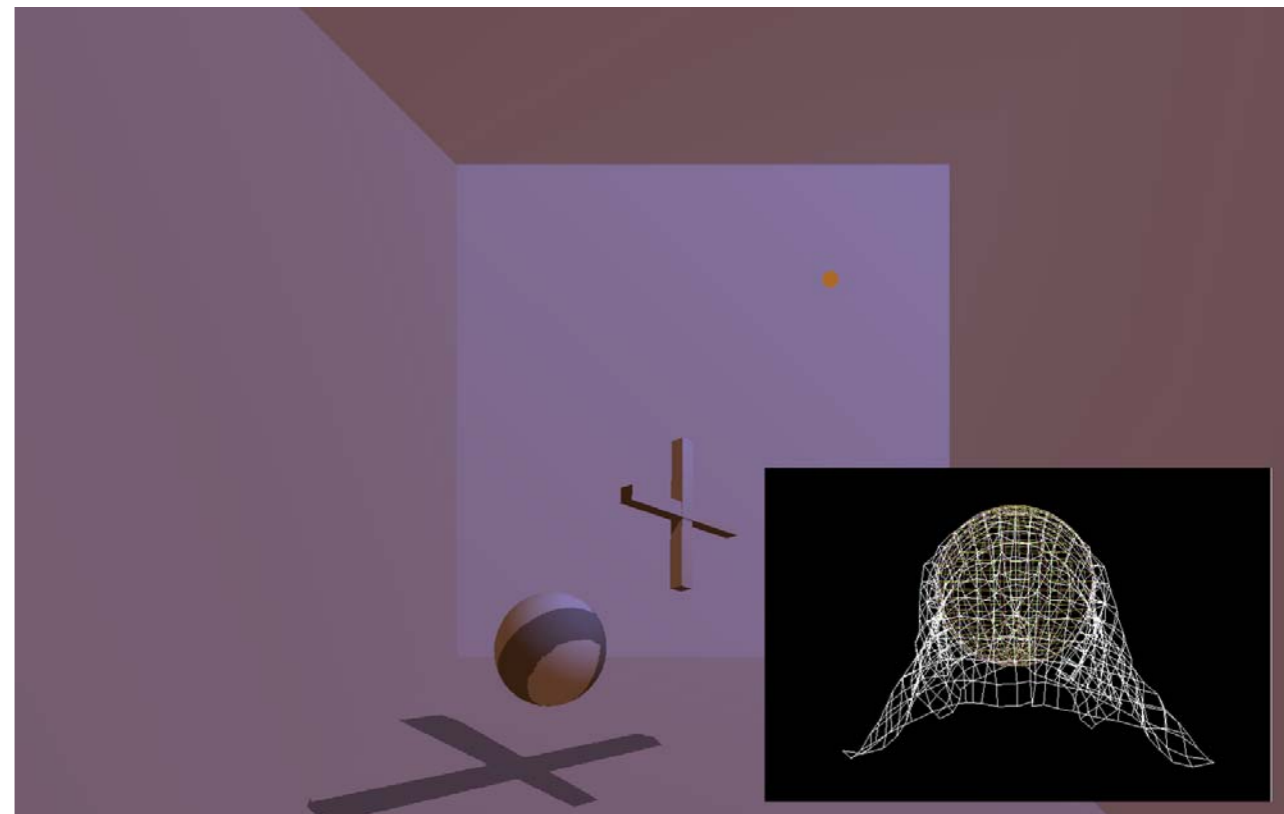
Physical simulation fascinated me because, we try to represent the world mathematically but a numerical model will never be able to simulate reality perfectly. With the increase of computer capacities, the mathematical models can be more and more accurate and realistic.

I've developed various demos. Most of these are specialised in physics effects. I've implemented different particle or spring systems and numerical integrations like Verlet, Euler or Runge-Kutta in order to represent clothing simulations, or car physics. Besides, I researched an algorithm to generate shadow volumes using Stencil and Depth Buffer.

*La nouvelle génération de matériel informatique permet la réalisation de simulation de plus en plus réelles. Je souhaiterais développer mes connaissances sur les réalités virtuelles et spécialement sur le thème des modèles physiques, le but de mes études étant de tenter d'améliorer les réalités virtuelles par l'implémentation d'effets spéciaux.*

*Les simulations physiques me fascinent car elles essayent de représenter, prédire mathématiquement le monde qui nous entoure bien qu'un modèle mathématique ne sera jamais capable de simuler parfaitement la réalité. Avec l'augmentation des capacités des ordinateurs, les modèles mathématiques deviennent de plus en plus précis.*

*J'ai réalisé diverses démos. La plupart sont basées sur des modèles physiques comme l'implémentation de différents systèmes de particules ou de masse - ressort comme Verlet, Euler ou Runge-Kutta et ont pour but de simuler le comportement d'une voiture ou de vêtements. J'ai également effectué certaines recherches dans le domaine de la génération d'ombres volumétriques.*





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## YANNICK RIOUALL

### Prog et Dev

Cursus universitaire:

Licence Math-info réalisée à Marseille, université aix-Marseille II

Master 1 Informatique à Lyon 1

Master 2 Gamagora

WonderWorld (screenshot 1)

Il s'agit d'une démo technique réalisée pour la GDC, fin 2007 à Lyon. Fait avec OpenGL, mon principal travail sur ce projet a consisté à réaliser un générateur procédural d'arbres aléatoire, avec affichage optimisé (LOD et Frustum Culling).

Le générateur à été exporté par la suite en directX 9

Moteur personnel

J'ai eu l'occasion de développer un moteur graphique en directX 9.

Celui-ci gère les shader HLSL, les soft shadow map, le multitexturing, le bump mapping et parallax mapping.

Pour les optimisations, le moteur utilise le frustum culling et le placement d'objets maillés dans un Kd-Tree.

Les maillages peuvent être chargé à partir de fichier .X, .obj.

J'ai intégré un moteur physique gérant les collisions entre tout les objets discrétisés au niveau de leur bounding box calculées automatiquement.

Il gère également les objets de type masse ressort.





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## NICOLAS VIDIL

### Prog et Dev

SOFTWARE DEVELOPMENT

PROCEDURAL TERRAIN GENERATION / SHADERS

Over my last year of study, I developed many different features used in a game engine. Among these features, the procedural terrain generation is the most interesting. There are several algorithms involved to shape the ground. The main algorithm is a variant from the basic “Diamond Square” algorithm. I modified it to allow having abrupt and sharp crests and smooth lowlands. Based on a single shader, the algorithm computes cliffs and texture blending according to the current altitude.

That tool allows game designers and level designers to create huge world modifying several environment variables. Defining the maximum and minimum altitude, the generation of a complex natural world becomes an easy task.

The modifiable variables are mainly “thresholds”. They are used for the tree generation and the type of ground. These thresholds compute tree position according to the kind of trees that are already there and if there is water or not.

Actually, giving “life” to a natural world, that is the difficult part of terrain generation. In terms of rendered techniques, I implemented different shaders in order to improve the image quality. Normal mapping, parallax mapping, relief mapping or shadow mapping are the kind of shaders that I implemented and that are used in almost all the games.

