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FORUM

AN INTERVIEW WITH LUCA ANTIGNANO (AKA MADRIGAL)



Luca Antignano (aka **MADrigal**) is a truly multi-skilled man, characterized by an extremely active presence and action in the international retro scene.

Being a great fan and collector myself, of the good old handheld and tabletop games, I was familiar with his quality simulators from the very early releases.

They are not lacking in the slightest to the real games on which they are based. Most of them have already upgraded to his most recent "quality standard", that he refers as "Standard 4".

You can find them all, free to download, on his site. [http://www.madrigaldesign.it/sim/]



His active presence does not only stop here.

Luca has been active in the field of hardware by constructing and producing a limited edition multigame cartridge for the rather "obscure" console **Creativision**. [http://www.madrigaldesign.it /creativemu/]





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Ευχαριστώ Άρη ! Πραγματικά, ο Luca...



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...κι εγώ μαθαίνω Αντώνη ! Αυτό...

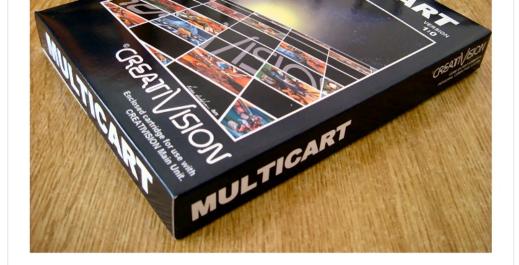


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An Interview with Luca Antignano (aka MADrigal)

ΕΠΙΚΟ!!! Τι να πω? για ακόμη...





He has worked for a famous games producer as a designer of four real handheld games. Two of them came into production (one with the consent of Namco) and were released in the American market. He has also been the founder and web master of the well known **Nintendo Zone** in Italy, which was a part of the **Emuita.it** network. [http://www.emuita.it/]

I invite you all to enjoy our little chat, we had recently on Skype !....

- Hi Luca! Welcome to iamretro.gr! We are all so glad to have you here!
- Me too, George. I thank you so much for giving me the opportunity to present my work to the Greek friends.



- You released tons of great simulators; so much authentic, I cannot distinguish the differences between them and the originals. I am not trying to flatter you, that's a fact!
- Very kind of you, thanks.
- I remember when I laid my hands on my first tabletop, my father brought to me as a present. I was a pupil and the game was a TOMY soccer, the one with many little red LEDs. Oh God... how many hours I spent with it! That was the ticket for me to enter the world of home computers and video games.

Did you own many tabletops as a kid?

- Well... I never had a single electronic game as a child. I was absolutely crazy for the pocket games but my parents totally disliked them and never wanted to buy me any.
- That's a pity...

- The truth is that my dad was saving money to present me with a C64 as soon as it was available on the Italian market (1983). He spent a fortune to buy one. That was the best Christmas gift I have ever received in my life.

I used to play my classmates' pocket games and I totally loved them. I mostly played games by Nintendo, Casio, VTech and Tomy and some very old electro-mechanical games without CPU – racing games with wheels and lights.

- Is nostalgia the reason that drove you to develop and release so many astonishing simulators
- I am a big fan of videogames emulators. I have been interested into emulation since I first heard about it in 1997. Then in 1999 I bought a used LCD game at a flea market and I noticed that there were no emulators for that game. So I thought it would have been cool to program one myself. But I soon discovered that I couldn't "emulate" it because the hardware specifications were totally obscure. Also, I couldn't identify the CPU model and extract the ROM data.

So I came to know about the existence of a bunch of "simulators" of electronic games, available for free on the Internet. As soon as I found out that they were real videogames, I thought it would be very fun to program a few myself! And in the end I programmed about 60.

So it is both nostalgia and the desire to challenge myself.

You are a little older than me, George, so I presume that you also approached the world of computing with a 8-bit machine, did you?

- Commodore 64 was my first home computer as well. I remember when my father took me for "a walk" into a computer shop. He showed me a C64 on a bench, asking me: "Do you want to take this one George?" This was one of the best days in my life!...

Endless days and nights, peeking and poking into the ram of my wonderful breadbox! I still have this one and in a great shape too!

Have you ever being involved on the C64 demo scene in the past?

– I am a familiar with the 6502 architecture and I know a bit of ASM, but I am not very experienced as an assembly developer – that is used by demo-makers. I have developed lots of programs on the C64 between the 80's and 90's, mostly with "BASIC". I have never produced any graphics demo, though. I had fun playing with the intro-maker tools and the "Action Replay MK5", but that was mostly because I liked to create computerized graphics.

I have always been interested into games design. My first significant experience was with the "Shoot'Em Up Construction Kit" on the C64. I designed a shoot'em up themed on my best favorite videogame, that is Bubble Bobble.

- Did you release it?

- I kept the game for myself for years. Then in 2002 I released an almost complete version to the public, which is Public Domain now. It is called "Bubble Bobble 2". It is not completely playable as I have never fully finalized and tested it.

It is available on the "**Ready64**" website [http://ready64.it/download /scheda_download.php?id_download=1]







I know that you're a big fan of the C64 demo scene, what kind of demos you like the most?

- I love watching demos and beautiful graphics, special tailored for C64. I am also a member of CSDb.

I think that demo makers are real artists. They are trying to push our 64s to their limits, exploring undiscovered territories hidden behind some "illegal opcodes" and addresses. We all witness 2 or 3 great demos every year, unveiling more secrets, presenting some effects beyond our imagination!

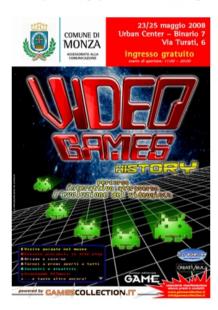
- Yes me too, especially the IFLI ones amazing!
- Have you ever attended any demo party?
- Never been to any demo party. One of the disadvantages of living on an island is the cost of transport to move to the mainland – where all retro fairs take place.
- Have you been to any "retro event" (fair / exhibition etc...) recently ?
- I was invited to take part to two important retro events in 2008 and 2009, called "Video Games History". There I had speeches about my experience as programmer of LCD games and producer of

the "CreatiVision Multicart" and "Diagnosticart" cartridges.



I then took part to "Milan Games Week" and "Brusa-Retro" in 2014. There I introduced my other project – the "CreatiVEmu" about the "CreatiVision" home computer/console. But that's another story!

(!) Luca is also a passionate graphics artist. He is the designer of these posters used to promote the Italian retrogaming events.





- How about the "Zzap!" magazine? Is there anything you want to share with us?





- "Zzap!64" was the top-selling UK magazine for Commodore 64 users. It was also published in Italy as "Zzap!" and it covered all the 8-bit computers. I used to buy the magazine every month, just like every other teenager back in the days. And I became a huge fan of Oliver Frey. the founder and cover artist of "Zzap!64", who has been a big source of inspiration in all my works.

Last October I have met him and **Roger Kean**, co-founder of the magazine, and I was granted the opportunity to interview them.

So last June I designed and produced a magazine to celebrate the 30th anniversary of "Zzap!64", containing the 8-pages interview, exclusive artworks made by Oliver, articles by the original Italian staff, special contents, etc.

The magazine is currently distributed for free through "Retroedicola Videoludica" [http://www.retroedicola.it/] and has became a big hit.

It also features 2 pages article about another project that I took part between 2002 and 2006, that is called "Zzap!Raine". Basically it is an online magazine featuring reviews of emulated arcade games, with the style of the "Zzap!"



It is in English and it's still online. I suggest you to have a read to it. [http://raine.1emulation.com /zzapraine/]

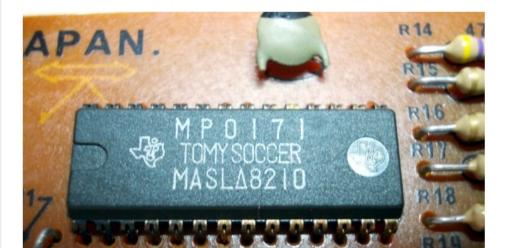
You have written an "intro" page on your site [http://www.madrigaldesign.it/sim/info.php]
 explaining the differences between "emulation" and "simulation". I think this is quite understandable even for the beginners.

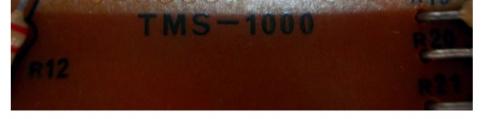
Have you ever released or started working on an emulator as well?

– I have made some experience in improving previously released emulators for the "CreatiVision" home computer/console. They are "FunnyMu (Unofficial by MADrigal)" in 2007 and the "CreatiVision" driver for MAME/MESS in 2009.

I have never programmed any handheld game emulator. The very first electronic games emulator was released a very few months ago by the MESS/MAME team.

The issue with electronic games is that there is a single MCU embedding CPU, ROM and RAM. Most of the times the MCU is not even marked with a code, so you can't figure out the model. The only option you have is "decapping" it – that's a costly procedure that often requires the MCU (and the game) to be damaged permanently. I suppose it is not very easy finding "donators" of rare electronic games for this purpose.





This is TOMY's WORLD CUP custom made CPU. It is a custom programmed 4-bit micro controller made by Texas Instruments

(TMS-1000 family) http://en.wikichip.org/wiki/TMS1000

It took over 15 years for the MESS/MAME team to release the very first electronic game emulator. Meanwhile we have all used the simulators, that are basically "clones" of the games, based on "how they play" rather than "how they work internally".

With a simulator you program a videogame (not a CPU emulator) that needs to be as accurate as possible – that is the closest possible to the original game.

Have you any tabletops in your collection?

- I am really proud of my handheld and tabletop collection! I have about 40-50 of them and I fulfilled my goal to acquire all COLECO and TOMY games, I envied since I was a kid. I adore VFDs though LCD screens are not my cup of tea.
 Are you into collecting handhelds?
- I never considered myself a collector of electronic games. I have had well over 100 games at home, but I bought them for programming purpose, not for collection. I sold most of my stuff before relocating to Australia, though. I am an active collector of "CreatiVision" stuff only, and I still keep a few consoles and my old C64 jealously.
- VFD or LCD games? Which ones do you prefer most?
- I love VFDs! I love the colour and the overall quality.
- 100% agree !!!
- The Coleco games really look like old arcade cabinets, that bring me of oh so many memories...



- Yes !...but they costed an arm and a leg back in the days....
- Yes, absolutely! I remember playing the very costly TRON tabletop by Tomy as a kid. I am a big fan of the TRON movies, so it was a pleasure and a pride for me to program the simulator.





- I also like TRON!

– The simulator was very hard to program. On that occasion I put major effort in replicating the Artificial Intelligence routines of the first mini game. Also, the "light cycles engine" sound effect was quite tricky to simulate in the beginning. This is a funny story to tell!

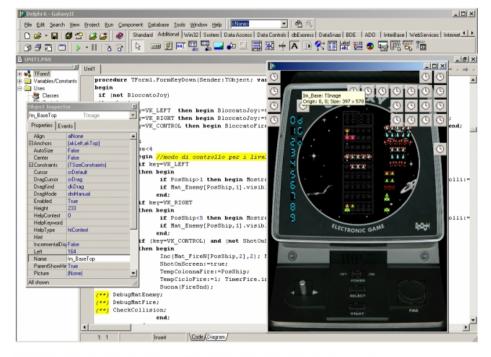
At the very early days of my simulators programming experience, I made use of the standard components included in Delphi (that is the IDE I use for programming). Well, the "Media Player" component was totally crap and buggy. It was not suitable to play that engine sound... so I had to find a workaround to make the simulator just like the original tabletop game.

I programmed an ASM routine that generated the sound through the PC's internal speaker. So the game played the normal sound effects (WAV) through the regular speakers, whereas the engine played from inside the PC – that was quite odd !!!

- Awesome infos !!!...

- Unfortunately Windows 2000 did not allow to access the internal PC speaker for direct writes, so
 that version of the game was compatible with Windows 95/98, not 2000!
 Some time later the great (and free) Fmod sound library was released for Delphi, so I decided to make
 use of it in all my games and get rid of the old media player component and the ASM routines.
- Your favorite programming language is Pascal/Delphi. Are you still using this IDE to develop your simulators?
- I use Delphi for my simulators and other software I developed in my profession.
 Whatever programming language is suitable to code a videogame. The advantage with visual IDEs like Delphi is that you have all the components ready for use. You can focus on programming the game routines only. On other development environment, such as C+SDL for example, you have to also program the video, audio and input management routines.

With Delphi I spend 99% of the time on the actual game programming, that is the thing I like the most.



- Have you ever thought of developing on other platforms, such as Java?
- I had thought of programming with Java, but the truth is that I am not a fan of it. And speaking of my games, I release them on Windows only because Delphi is native to Windows.
- Have you ever considered porting the games to Android?
- Unfortunately I don't have much time to port the games to other OSes. However, a few third-party

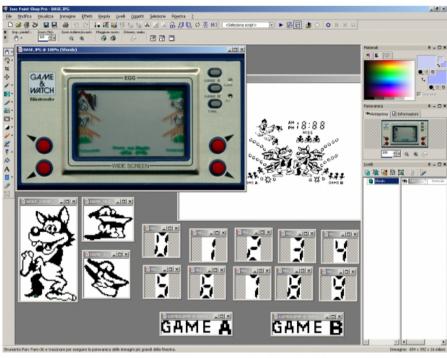
programmers have converted my games to other systems such as PSP, GP2X and Linux. And a very talented Brazilian programmer has recently ported all my games to a very promising platform called Lib-Retro/Retro Arch.

It is a sort of emulator/interface/devtool made available to a great number of platforms including Android. So now you can play my games on Android too. In this case my source codes were converted to a different language, called LUA, that is the basis of the Lib-Retro library.

- How long does it take to make a simulation?

– In my experience, some games took 2 days, some other 30 days... it depends on the complexity of the game.

Also, sometimes it is very easy to grab all the graphics from the game. Some other times you have to scan the game 20 times to get decent pictures. Then I spend a lot of time cleaning the scanned images in order to obtain very polished and crispy graphics.



Only when the graphics are ready, I start the programming phase that alternates with playing sessions. I play the original game, make my notes, then program a few more routines, and then back to playing till I'm finished.

- Do you work alone? How much do you rely on beta testers?

– I work alone. I very rarely use beta-testers because it's hard finding people that simultaneously own the game you are simulating, and are willing to spend their time testing your simulator in order to evaluate its accuracy.

So I prefer relying on the feedback I get from players of my simulators: some of them find inaccuracies and report them back to me.

- When do you feel is the time to finalize and release the game?

– I decide that the simulator is ready for release when I reckon that it is the closest match to the original game.

That is: only when all the routines have been programmed and tested, all the "states" have been programmed properly, the difficulty is well calibrated, the game is fully playable.

Sometimes it is quite hard to understand how the original game works, especially in terms of the "random numbers generator". That basically means: how many enemies on screen simultaneously? Why and how the program "decides" that it is time to generate a new enemy on screen? How does it "move"?

I play the original game for long time, I "explore" and "stress" it. When I can notice no difference between the real game and the simulator, I decide to release it.

- This sounds quite a harsh process, isn't it?

– It depends on the game... Some games are so simple that the whole programming phase lasts a few hours, some others require weeks and big effort. Sometimes it's hard – but it is always worth it!

- Had you any funny or frustrating incident(s) during developing?...and like to share with us?

– Frustrating incidents? Not that I remember of...A couple of times the games got broken during the programming phase so I had to repair them in order to continue. They are fragile machines, over 30 years old...



- You have also published an excellent online guide for any new programmer wants to get involved into the "scene". [http://www.madrigaldesign.it/sim/tutorial.php]
- I wrote that tutorial in 2000, so it is quite outdated. However I then wrote a more complete one for an Italian magazine, called "Gamers". It has also been recently re-published on the Italian magazine called "Retroedicola Videoludica". Unfortunately that's available in Italian only. You can download all of them from the "Press review" section on my Simulators website. [http://www.madrigaldesign.it /sim/press.php]
- What is your favorite simulator among all your great releases and why?
- I don't have a favorite simulator. But there are several games that I like more than others. TRON is one of these. I love the idea of having 3 games in 1 on a single screen. Re-using the same sprites in 3 different mini-games makes the game closer to a real computer game. I think of the sprites as pixels in this case.

Another game I love is Mario Bros, the "Multi Screen" game. I used to play it a lot as a child. I love the game design, the idea that you have to keep your eyes left and right of the screen continuously. The challenge is not getting a headache when playing!

- Totally agree! I own this one, find it quite difficult for this reason as well...
- But in general, I am a Nintendo fan, so the games from the Mario/Donkey Kong family are probably my favourites.

Do you know that I owned a Nintendo website long ago?

– You mean the Italian Game & Watch side?

No. You probably never heard of Nintendo Zone. It was the main Nintendo resource on the Internet, in Italy, between 2002 and 2006. It was devoted to emulation and game reviews of N64, GBA, Gamecube and Wii. It was part of the Emuita.it network – that was pretty big at that time.
 I had a staff of 20 people with me... all enthusiasts, working non for profit. We wrote beautiful reviews, articles, interviews, and so on. So I am definitely a Nintendo fan.



- Was this an official Nintendo licensed site?
- No. But we got insider news from Nintendo and third parties such as Ubisoft, Kemko, etc.
- 111...
- ...but since it was a non-for-profit network, I couldn't afford to spend so much time on it. After a few years I had to drop the network down.
- It is online again, as a "backup". You can enjoy the old reviews and news. But the timeline stops in 2006.
- URL please?
- It is here: http://www.madrigaldesign.it/nzone/.
- "Game & Watch Mania" my other website devoted to Nintendo Game & Watch, was also part of the Nintendo Zone network. [http://www.madrigaldesign.it/gwmania/]



- Thanks !!!... Speaking of Nintendo...Mr. Gunpei Yokoi was the father of G&W, Gameboy and so many other marvellous gadgets. He was a pioneer and a zealot of creation and innovation. I would like to hear your opinion about him. Speaking with terms like "Creativity" and "Perfectionism", do you find any common points with him?
- Oh man... I can't compare to Gunpei Yokoi!

I have not invented anything. I am just a humble programmer. I am a perfectionist for sure and probably totally crazy too.

Gunpei was a blessing for us all. We have lost a generous and innovative man.

- ...but I think big Ninty didn't treat him very well after the release of Virtual Boy.
- So true. Nintendo has made many mistakes, unfortunately. Virtual Boy was one of those. You see, sometimes it is simply the right console in the wrong moment in history... I believe that Virtual Boy had good ideas in it, but it was not the right time for it.

 Have you ever played with a Virtual Boy?
- Sure I did! I own 4 of them! I find them very interesting and...cute!
 I also own a Flash Boy, so I have the chance to test and play any game of the newcomers.
- Gorgeous!!!
- I love "Mario's Tennis". I find that both 3D effects and depth perception are fascinating on this one...

Oh! Did I mention that I am a SEGA fan?

- SEGA? Never heard of it... What's that? Haha!
- I have noticed that you have already updated most of your simulators to version S4 (Standard 4). It is really a major step forward. High resolution and crisp graphics, completely new code... so many new features. Can you point all the significant differences against you previous releases? What's coming next?
- Well...The games released under my previous standards lacked many features that are required by many users nowadays.

The most required feature by users is that they want to play the simulators in their MAME-cabinets. So, the simulators need to be controlled via the keyboard, not the mouse.

Well, the games released as per the "Standard 3" require the use of keyboard *and* mouse. The newly released games (Standard 4, or "S4") can be controller with keyboard only, and the keys match the ones of MAME (1, 2, 3, 5, arrow keys, control).

Also there are several improvements in terms of interface:

- Splash screen can be removed, or you can close it with a key press.
- The game fits a 1024×768 desktop.
- LCD sprites are shaded and also drop shadows.
- All buttons are fully animated.
- Sound effects volume has been normalized. All the games have the same volume.
- The input management has been improved a lot.

I am planning to upgrade all the S3 games to the S4 standard, but unfortunately I don't own the games anymore so I can't make new scans at higher resolution. I have upgraded about 52 out of my 59 simulators and I would like to upgrade the remaining 7, but I need help from collectors in terms of high resolution scans of the original games. Not an easy finding...

If I will succeed in upgrading all the games to Standard 4, I have something new in mind for a new standard....Full screen for all games and "skin" systems to allow users to customise the games with graphic packages.

- You're teasing us ...
- It is something I have in mind, but not sure when/if I will have the time for.
- Would you like to share some info about your education background and career as a game inventor? Are you still in gaming manufacturing business?
- I am an Architectural Engineer, that is partly Civil Engineer and Architect. I have also significant experience in IT with a focus on Systems Administration, Software Engineering, Web Design and Graphics Design.

Since I moved to Australia last year, I am back to my root that is the constructions industry. I specialize in Remedial Engineering.

- I also remember one of your posts in inventors section at the Handhelds Museum Forum [http://www.handheldmuseum.com], mentioning that you've been involved to develop real handheld games for a big company...
- Well yes, I have some experience as game designer, too. I was hired by a major toys producer a few years ago. My task was to design a few new electronic games. I designed four games that were then submitted for approval by the licensors including Namco. Two games were actually produced and hit the market in America.
- I strongly believe that manufacturing of the first tabletops wasn't an easy task. Many skilled employs were required and artists had a unique place among them.
 Paul Jaquays for example was the co-designer of game play and vacuum fluorescent display designer of many Coleco tabletop games. Jaquays is also a professional artist.
 Has a modern creator / programmer to combine many skills? Being an engineer or programmer, is enough to create something unique?
- I believe that modern game designers are very different to the ones of the 80's.
 Let's make an example with electronic games... A single person couldn't do the entire job by himself.
 In my case, I designed the games and programmed demos. Then the game was converted to ARM assembly by a programmer, whereas the LCD screen was vectorized by a graphic artist for production. The plastic casing and the packaging were then designed by some 3D modeller artist...
 Even the smallest start-up's today need to at least have a game programmer and a graphic artist. It is extremely hard to find a single person that can do it all by himself.
 If you think of David Crane, or Jeff Minter...They are geniuses! Good ideas and good skills. They could produce incredible games.
- Totally agree!...Have you ever met in person or had some sort of communication with any of the originals handhelds / tabletops creators?
- Never. I have no idea who they are. Most of these games were probably designed by in-house employees. Probably in Japan or China...I think their names are still obscure.
- Let's chat a bit about modern handhelds. I am not referring only to giant companies like Nintendo or SONY. I will include also some other manufacturers like Game Park with GP32, Pandora etc with a less market share. What do you think will be their future? Will be swallowed by smart phones evolution and versatility or will both (smart phones and portable gaming devices) coexist together?
- Well...I think that mobile phones gaming was the future but it is the present already. We are slowly
 moving towards having all the services in a single device.

Tablets and smart phones are replacing everything, even in the world of professionals. I believe that

despite all the efforts by the major console producers such as Sony and Nintendo, their portable consoles will not last forever.

About the other portable consoles, well they're very cool gadgets, but I believe that they will remain as "niche".

- Will new generations continue to play classic games or eventually they are going to be forgotten, being remembered only as relics?
- Well when I was at the retrogaming events I have spoken to many very teenage videogamers and they were incredibly keen on the old classics. Maybe they do not have the knowledge of the very old vector games such as Asteroids, but they are well aware of the importance of the videogames of the pioneering era. They watch the old videogames from a different perspective than ours, and they probably feel sorry for not having been there during those days. I don't think that the old classics will be forgotten.
- Did ever say to yourself... "this is time to move on and leave the retro gaming scene"?
- Never. It is a big part of my life and I can't do without it.
- Reaching the end of this interview, I would like to thank you for this extremely interesting and nice chat! Would you like to add something else, I forgot to ask you?
- Oh well, I have spoken even too much! So all I want to do is saying thank you so much for this wonderful chat, I enjoyed it a lot and I hope that the readers will also enjoy reading it. God bless you, retrogamers!



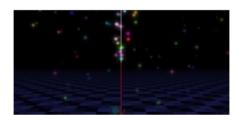


geoanas

Μανιώδης συλλέκτης retro hardware από calculators μέχρι πλακέτες arcade. Ηλεκτρονικός και μάστορας (από εμπειρία) θεωρώ το hardware engineering μια μορφή τέχνης και δεν χάνω την ευκαιρεία να αρπάξω το πιστό μου κατσαβίδι και το πολύτιμο μου κολλητήρι για να επισκευάσω, βελτιώσω ή να mod-άρω

οτιδήποτε. Μπήκα στην retro scene, όταν ακόμα δεν ήταν retro (!) , Gamer από κούνια 40 χρόνια έχω παίιιιιξει !!

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4 COMMENTS



antnik

September 23, 2015 at 11:43 pm

Μπράβο Γιώργο!!! Τι άλλο να πω. Η προσφορά σου ανεκτίμητη. Εγώ μαθαίνω συνέχει πράματα από τις συνεντεύξεις που παίρνεις και τα άρθρα σου.

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geoanas

September 24, 2015 at 6:01 am

...κι εγώ μαθαίνω Αντώνη ! Αυτό εξάλλου έχει αξία... Μαθαίνουμε, συζητάμε, κρατάμε την retro ιδέα ζωντανή.

Σε υπερευχαριστώ για το video intro!

Log in to Reply



arislab

September 24, 2015 at 12:36 am

ΕΠΙΚΟ!!! Τι να πω? για ακόμη μια φορα Γίωργο κατάφερες να μας αφήσεις με το στόμα ανοιχτό! ΧΙΛΙΑ ΜΠΡΑΒΟ και ΣΈΥΧΑΡΙΣΤΟΥΜΕ!!! ο τύπος είναι θρύλος, και μπραβο του γιατι απ'ότι είδα και στην σελίδα του μας δίνει ανοιχτό τον πηγαίο κώδικα!! $^{\circ}$

Log in to Reply



geoanas

September 24, 2015 at 6:03 am

Ευχαριστώ Άρη! Πραγματικά, ο Luca είναι ένας ευγενέστατος άνθρωπος με ανεκτίμητη προσφορά στην retro κοινότητα. Είναι γεγονός ότι κι εγώ έμαθα πολλά μέσα από αυτή τη συνέντευξη.

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ΑΦΙΕΡΩΜΑΤΑ



id Software...

Από το 1992, τα 3d shooter παιχνίδια...

☑ Feb 20, 2013 👁 645 views 🗘 6



TA MYΣTIKA...

Πάει πολύς καιρός που ασχολούμαι με το...



XXX -...

Το να ασχολείσαι με τα ρετρό είναι...

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ΔΙΑΒΑΣΤΕ ΑΚΟΜΑ



$\Pi\Pi\mathsf{EPATA:}...$

Αλήθειες για τον κόσμο των υπολογιστών (και...

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🦊 ΚΑΝΤΟ ΟΠΩΣ...

Καντο όπως ο Ryan Gosling.....απλά μη το...



ПІПЕРАТА :...

Αλήθειες για τον κόσμο των υπολογιστών (και...

TAG ATTACK

AMIGA

3DS

COMMODORE

RECAP

IAMRETRO

AMSTRAD

RETRO

ΑΛΛΑΓΗ ΠΥΚΝΩΤΩΝ

NINTENDO

SPECTRUM