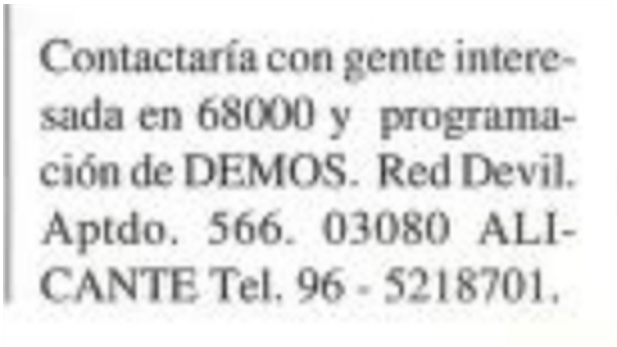
About thirty years ago (it seems like yesterday) I went to the North train station to pick up a contact of Atari who came from Alicante. It was a Saturday, was the day he could and came to spend the bulk of the day at my house. Copyparty. About thirty years ago, there were no mobiles, our only contact I think I remember was by mail, we had never met. But we did meet. It wasn't difficult, it was the kid who came with a box of disks under his arm.
I already knew he was young, but it wasn't that he was young, he was YOUNG. Fuck, I remember it perfectly, I looked at him with healthy envy (Who will reach his level?). It really wasn't my aim, I just knew four little things.
We spent the whole day copying and chatting. He proudly showed me his demo that he had made after giving the trigonometric functions in math class (I wondered what would happen when he gets the integrals?), chatting about protections, games, demos.
Today, about thirty years later I have the honor to present you an interview made along this year to one of the most significant and international characters of the original Atari ST scene in Spain.
Ladies, gentlemen, with you Red Devil:

The origins
-Before the atari, did you have contact with any other computers?
An MSX, but there maybe I was too small (I had it I think when I was 11 years old) I hardly did any programming.

-How did an atari get into your house?
-Your request? -Why?
-Paternal initiative? Why?
I was a normal student up to 8 years old, I didn't fail but I didn't stand out either: I was close to a B, I had never gotten any A's. As soon as I started 1 of BUP the 16-bit computers came out and I loved them: both the ST and the Amiga. I told my father that I wanted an Atari ST and he told me that I could buy it myself: he would help me by giving me 5000 ptas for each A that I got, and the truth is that I had never got any A until then; but such was the desire to have an ST that I studied like crazy in 1 of BUP and got all A's... and of course: my father was right and I ended up buying it myself.

-How were your beginnings programming? -Mentor? Books? Magazines?
I have been quite self-taught, in this video https://vimeo.com/305100749 (go to minute 5) I tell how I learned. Magazines were one of the ways to create community, look at the ads I found**:**


Contactaría con gente interesada en 68000 y programación de DEMOS. Red Devil. Aptdo. 566. 03080 ALICANTE Tel. 96 - 5218701.

And then the truth is that we had very little information, to the point that I had to ask in magazines quite basic issues of specifications:

Hola amigos de ATARI USER, les escribo para ampliar la respuesta dada en la carta de Juan Miguel Benavent referente a la digitalización de imágenes en color.

Lo que se puede hacer es poner primero un filtro de rojo a la cámara y digitalizar la imagen, así con los dos colores primarios más; el verde y el azul; una vez tengamos las imágenes el VIDI ST (el MIXIMAGE) es capaz de mezclarlos y obtener una imagen en formato SPECTRUM.

Espero que la ampliación resuelva la duda.

Ahora una pregunta mía: ¿me podrían decir las direcciones de memoria en las que están los registros del nuevo chip de sonido del STE así como acceder a ellos (modo control).

Ruego me respondan la cuestión

Red Devil.
Apdo. de Correos 566.
03080 ALICANTE

Deliverance

-How did you get to deliverance? -Was it already formed when you came in?

Well, I don't remember exactly how I got there, but I do remember that I was trained. Most probably I read the phone or post office box in some menu and called or wrote to them.

-Your stay in deliverance as you remember it?

I have good memories because it was very difficult to find people with the same interests and that of making demos, menus, etc. was the maximum. Also it was mixed that I was in BUP just studying things like matrices, breasts, cosines, etc. and the programming of demos with little things in 3d meant for me the demonstration that mathematics had applications at my reach.

-Have you been in touch with any member of the group?
No. Look I have uploaded to github the records I have recovered (thanks to Poliyo Soft!) and for example here you can see who we were on October 14th 1989 (I was 14 years old!)

THE DELIVERANCE ARE: ALEATUM SOFT, GAL, TRUAN, RED SKIN AND RED DEVIL (Taken from the source code of menu 12) and the list changed for example in a screen called ELECTRICITY DEMO we were: ALEATUM, SCRATCHIN, RED DEVIL, CAPTAIN SPOOK, TRUAN and RED SKIN.

As a result of this interview I have contacted SCRATCHIN (the band's musician) who kept his Atari ST until last year!

-And with scene members even if they weren't deliverance
I made a lot of friends around that time, some of whom have since become entrepreneurs or dedicated themselves professionally to issues very much related to what they were doing.

-You knew in those years if any menu had repercussions outside Spain
Well, the truth is that one summer I went to England (I would say at 15-16 years old) there was a Swedish boy who also loved the scene and he did know some intro or menu. That impacted me.

-Did you have contact with any other Spanish crew that made compilations? (iron man, the best, magic crusaders, for example.)
To tell you the truth I don't remember but reading the scrolls I see that I do (laughs).

Cracking
-What was your first crack?
-Do you remember one in particular with great affection? either because of the challenge, because you liked the title, or because of the simplicity?
I remember there was one that a friend bought and it was from ancient Egypt. Looking online I think it's the Eye of Horus but I'm not sure.

-Were there any you couldn't handle?
Cracks, no.

-Were there any that you couldn't crack because you didn't have the original but you would have liked to?
Most of them. I almost didn't get originals so I immediately started making demos and in the line of crackers I made the opposite: a protector; the MEGA PROTECTOR.

Packing
-What was the packer you were most comfortable with?
-Was there a packer that I think you modified? Did you ever think about writing your own?

I remember using packers and I had absolutely no idea how they worked inside and I was fascinated. I needed more time (already in the race) to understand it.

Programming
-Which program did you find most challenging?
I remember the routine to do the soft scroll in the Atari ST (with the STe you could make it easier). The ST for example allowed you to change the video memory direction from which you start to scan but it didn't allow you to do it even from the line.

In order to relocate video RAM, another register is used. This register is three bytes long and is located at $FF8205. Video RAM can be relocated in 256-byte incremeents. Normally the starting address of video RAM is $78000.

```
$FF8205   8-bit  Video address pointer (high-byte)
$FF8207   8-bit  Video address pointer (mid-byte)
$FF8209   8-bit  Video address pointer (low-byte)
```

These three registers are read ONLY. Every three microseconds, the contents of these registers are incremented by 2.

Note that simply by putting in one more BYTE to be able to put the VRAM in another place you could make games with ultra smooth scrolling. They saved a byte and left the ST with horrible scrolling because that way you couldn't simulate the whole screen moving one line by simply telling it to start sweeping one line behind.

But one way was to turn it around was the fact that you could remove bits of edge from the sides on the vertical edge (using a brutal hack that was changing the resolution or frequency in the middle of the sweep) so that when you got to a point the sweep actually started in different places. That way you could calculate ways to remove the edge so that with many combinations you could place the start of the sweep more or less arbitrarily; but to do that you had to calculate for each line start the pixels that the sweep spent in each case. I remember that I wanted to do it more or less mathematically but it was a discrete math problem that I had no idea how to tackle at the time so I made a program in basic GFA that took out the combinations by brute force (I guess that's maybe why I studied engineering and not math). Then you put in that table (which in a way seemed magical to me) with the assembly code to remove the edges and you did soft vertical scrolling. The code is this:

```
** IT WORKS!!!!!!!!!!!!!!
** WOW, THIS IS THE HARDWARE ROUTINE
** SCROLLER FOR THE ATARI ST! ESTA
** TIME IS HORIZONTAL... THE OPERATION
** IT'S A LITTLE MORE COMPLICATED THAN MY
** LAST HARDWARE SCROLLER (VERTICAL)
```

```
** BUT THAT DOESN'T MAKE IT IMPOSSIBLE TO
** UNDERSTAND... I EXPLAIN: THE LENGTH
** IN BYTES OF A NORMAL SCAN LINE
** IS $A0, FROM ONE WITH AN OVERSCAN FOR THE
** RIGHT IS $CC AND WITH THE TWO EDGES
** IS $E6, PLUS THE FIRST TWO LINES
** IF WE OVERSCAN ON BOTH SIDES
** IS $158 (I THINK) AND THE SECOND OF THESE
** BELONGS TO THE $E6 OVERSCAN (TOTAL)
** SO I HAVE TO RAISE 1 IN THE
** REAL OVERSCAN LINES. ONCE
** UNDERSTOOD THAT MORE OR LESS, WE HAVE TO
** GET THE BEGINNING OF THE
** SCREEN IS $...08,$10,$18 AND SO ON,
** THIS IS DONE BY PUTTING IN FULL LINES
** SCREEN CALCULATING ITS LENGTH IN BYTES
** AND BY SUBTRACTING ONE FORM DATA $XX.. AT
** THE SCREEN ADDRESS (VIDEO BASE LOW)
** WE GET THE EFFECT OF THE DESIRED SCROLL!

** IF YOU DON'T QUITE UNDERSTAND, TELL ME:
** RED DEVIL, APT 566, 03080, ALICANTE

* (C) ALL ROUTINES EXCEPT THE TWO FOR
** FULLSCREEN: RED DEVIL!!!!!!!

        CLR.L -(A7)
        MOVE.W #$20,-(A7)
        TRAP #1
        LEA $D0000,A0
        LEA $F8000+$7D00,A1
SS      CLR.L (A0)+
        CLR.L (A0)+
        CMPA.L A0,A1
        BGT.S SS
        LEA PIC+34(PC),A0
        LEA $D8000+($1300)+(60*160),A1
        LEA $D0000+($1300)+(60*160),A2
        MOVE.W #((131*160)/8)-1,D0
KKH     MOVE.L (A0),(A1)+
        MOVE.L 4(A0),(A1)+
        MOVE.L (A0)+,(A2)+
        MOVE.L (A0)+,(A2)+
        DBF D0,KKH
        MOVEQ #8-1,D2
D2L     LEA $D0000+($1300)+(60*160),A2
        MOVE.W #131-1,D0
D0L     MOVE.W #0,CCR
        MOVEQ #4-1,D1
D1L     ROXR 8*0(A2)
        ROXR 8*1(A2)
        ROXR 8*2(A2)
        ROXR 8*3(A2)
        ROXR 8*4(A2)
        ROXR 8*5(A2)
```

```
        ROXR 8*6(A2)
        ROXR 8*7(A2)
        ROXR 8*8(A2)
        ROXR 8*9(A2)
        ROXR 8*10(A2)
        ROXR 8*11(A2)
        ROXR 8*12(A2)
        ROXR 8*13(A2)
        ROXR 8*14(A2)
        ROXR 8*15(A2)
        ROXR 8*16(A2)
        ROXR 8*17(A2)
        ROXR 8*18(A2)
        ROXR 8*19(A2)
        ADDQ.L #2,A2
        DBF D1,D1L
        LEA 160-(4*2)(A2),A2
        DBF D0,D0L
        DBF D2,D2L
        MOVEM.L $FFFF8240.W,D0-D7
        MOVEM.L D0-D7,OLDCOL
        BSR SINT
VSYNC   CLR.B SYNC
WAIT    TST.B SYNC
        BEQ.S WAIT
        MOVEM.L PIC+2,D0-D7
        MOVEM.L D0-D7,$FFFF8240.W
        MOVEA.L CHSC,A0
        MOVE.L (A0)+,CONTLR
        MOVE.L SCREEN,D0
        BCHG #15,D0
        MOVE.L D0,SCREEN
        MOVE.L (A0),D1
        SUB.L D1,D0
        LSR.L #8,D0
        MOVE.B D0,$FFFF8203.W
        LSR.W #8,D0
        MOVE.B D0,$FFFF8201.W
        ADD.L #8,CHSC
        MOVE.W 4(A0),D0
        BPL.S SISCRL
        MOVE.L #SCDATA,CHSC
SISCRL  CMP.B #$39,$FFFFFC02.W
        BNE.S VSYNC
        BSR RINT
        MOVEM.L OLDCOL,D0-D7
        MOVEM.L D0-D7,$FFFF8240.W
        CLR.L -(A7)
        TRAP #1
OLDCOL  DS.W 16
CDOL    DS.W 1
SCREEN  DC.L $D8000+($1300)
SINT    MOVE.W #$2700,SR
        LEA INTS,A0
        MOVE.L $70.W,(A0)+
        MOVE.B $FFFFFA07.W,(A0)+
        MOVE.B $FFFFFA09.W,(A0)+
        MOVE.B $FFFF8260.W,(A0)+
        MOVE.B $FFFF820A.W,(A0)+
        MOVE.W $FFFF8240.W,(A0)+
        CLR.B $FFFFFA07.W
        CLR.B $FFFFFA09.W
```

```
        MOVE.L #FULLVBL,$70.W
        MOVE.W #$2300,SR
        RTS
RINT    MOVE.W #$2700,SR
        LEA INTS,A0
        MOVE.L (A0)+,$70.W
        MOVE.B (A0)+,$FFFFFA07.W
        MOVE.B (A0)+,$FFFFFA09.W
        MOVE.B (A0)+,$FFFF8260.W
        MOVE.B (A0)+,$FFFF820A.W
        MOVE.W (A0)+,$FFFF8240.W
        MOVE.W #$2300,SR
        RTS
INTS    DS.L 3
FULLVBL MOVEM.L D0-D7/A0-A6,-(A7)
        LEA $FFFF8240.W,A0
        MOVEQ #0,D0
        MOVE.L D0,(A0)+
        MOVE.L D0,(A0)+
        MOVE.L D0,(A0)+
        MOVE.L D0,(A0)+
        MOVE.L D0,(A0)+
        MOVE.L D0,(A0)+
        MOVE.L D0,(A0)+
        MOVE.L D0,(A0)
        LEA $FFFF8209.W,A0
        LEA $FFFF8260.W,A1
        MOVEQ   #0,D1
        MOVEQ   #$10,D2
        MOVEQ   #2,D3
        MOVEQ   #0,D4
        MOVEQ #28-1,D5
        MOVE.W CONTLR,D6
        MOVE.W CONTLR+2,D7
        SUB.W D6,D5
        SUB.W D7,D5
        MOVE.W  #$2700,SR
        MOVEQ   #10-1,D0
WAIT1   DBF     D0,WAIT1
        CLR.B   $FFFF820A.W
        MOVEQ   #3,D0
WAIT2   NOP
        DBF     D0,WAIT2
        MOVE.W  #2,$FFFF820A.W
COUNT1  MOVE.B  (A0),D0
        BEQ.S   COUNT1
        SUB.W   D0,D2
        LSL.W   D2,D1
        LEA $FFFF820A.W,A0
        REPT 85
        NOP
        ENDR
MAINLO1 REPT 10
        NOP
        ENDR
        MOVE.B  D3,(A1)
        MOVE.B  D4,(A1)
        REPT 89
        NOP
        ENDR
        MOVE.B  D4,(A0)
        MOVE.B  D3,(A0)
```

```
        REPT 13
        NOP
        ENDR
        MOVE.B  D3,(A1)
        NOP
        MOVE.B  D4,(A1)
        DBF     D6,MAINLO1
        BRA.S COLOCA
MAINLO2 REPT 4
        NOP
        ENDR
COLOCA  REPT 99
        NOP
        ENDR
        MOVE.B  D4,(A0)
        MOVE.B  D3,(A0)
        REPT 13
        NOP
        ENDR
        MOVE.B  D3,(A1)
        NOP
        MOVE.B  D4,(A1)
        DBF     D7,MAINLO2
EVBL    MOVEM.L (A7)+,D0-D7/A0-A6
        ST SYNC
        RTE
SYNC    DS.W 1
CONTLR  DS.W 1
        DS.W 1
CHSC    DC.L SCDATA
SCDATA  INCBIN 'HARD.DAT'
        DC.W -1
PIC     INCBIN 'REDLOGO.PI1'
```

-Which one gave you the most satisfaction?
Technically the soft vertical scroll; but satisfaction really was finishing and taking things out, any "product" taken out generates satisfaction. I remember the Mega Ripper and the Mega Protector with great affection.

-The deliverance menus I think were mostly your programming. You never thought about making a mega demo?
Yes. In github you can see that there are many screens almost finished and I lacked the push to join everything and take it out.

Tips
-What applications do you consider indispensable in the world of Atari?
MONST, DEGAS ELITE, DELUXE PAINT ST, NEOCHROME, DEVPAC

-Game level, which one marked you more and you think it should be in every Atari program library.
To be honest, the games were terrible in terms of playability; even compared to 8-bit games, especially Konami's MSX games. I remember that for the Xenon (1) and I don't know why the Deflektor.

-And with the demos. Do you remember which ones impressed you the most?
Cuddly Demos, The Union Demo, SoWatt, Whattaheck, Punish your Machine.

-What readings would be essential?
I had the Atari ST internals.
https://archive.org/details/Atari_ST_Internals_Abacus_2_3rd_edition_1986/mode/2up I remember that there were things that were hard for me to understand because they were in English; but now by re-reading it I have realized that some things are badly explained.

Future
-Do you think you have anything left to do on this platform and do you think you could develop it in the future?
I have uploaded here what I have from the time to the cloud, I was left to take out the MEGADEMO but as I started the career I changed computer (to a PC) and with studies and so on I did not continue in the ST.