

A Virtual One To One with Geoff Crammond

Interview By [James Connors](#)

question one :

Geoff, many people know you for your well-established works in games such as the much loved Grand Prix series, Stunt Car Racer and Revs to name just a few of the titles you have worked on over the years . In your day-to-day world , do people still refer to you as Sir Geoff with a knowing nod :) or is it just plain old Geoff down your local golf course ?

The number of people that I know who call me "Sir Geoff" now is about the same as it was back in the day.

question two :

As a programmer do you still get the urge to dally in projects or is that now a thing of the past?

I am still programming and working on this and that because I just enjoy it. I have done a lot of projects involving things that interest me. I do all my programming in C++ these days. I never had the time to learn to use it I was working on F1. Now I really like it. Everything is so much easier to implement than when using assembler. Programs are easier to structure and develop and debug. I have also written 3D programs that run on the iPhone and iPad so I am reasonably up to date.

question 3 :

With modern Racing simulators such as Assetto Corsa / RFactor 2 and Iracing currently leading the field have you ever thought that you could come out of your self imposed "Racing Sim creator" exile and give the new kids on the virtual block a run for their money?

One of the projects I did a few years ago was to convert my assembler version of the GP4 sim and AI to C++ so it wouldn't become totally dead code. Most of the Microprose code is in C++ as well so I have got a useable code base. I have done things just for fun, like I did a 3D version of GP4 which I can play on my 3DTV. I think that the F1 licensing requirement really stops me thinking about doing anything further in that direction. I find it hard to get excited about other formulae having done F1 for 12 years. Also as you say, racing sims are being done elsewhere so the incentive to take on a big F1 project with all the time and effort that would require maybe isn't there.

question 4:

With current PC's & Consoles being many times more powerful now than back in GP 4's Hay day.... With four, six and eight core CPU's & powerful graphic card GPU's and more memory than you could throw a virtual stick at, what do you think could be improved upon by the current racing sim developers to utilize the systems today to further the virtual sim racing experience?

Hmmm...that would be telling

question 5: ***Grand Prix 4 Batch Lot :)***

Grand Prix 4 still remains a firm favourite with the PC Sim racers and is largely kept up to Date by a group of enthusiastic modders. It would be remiss of this interviewer if I didn't ask some questions on this still popular sim.

Will the source code for Grand prix 4 ever be released in any form?

I have no plans to release it.

Were there any further patches made after the official patch v9.6 to address remaining issues?

The official patch is the only one that saw the light of day. When GP4 was released, I fully expected that GP4 would be supported with patches as and when required for the foreseeable future. Unfortunately the foreseeable future turned out to be only a few weeks. The official patch was done under very difficult circumstances because everyone in the studio had just been told by the owners that they had to find another job.

Why wasn't the online mode completed in the released version?

I understand there were commercial reasons why we were not able to do this.

From our understanding the tracks were built in an earlier version of 3ds max so what tool or program, plugin or script was used to create the .Dat file? And would you consider releasing this to the modding community?

The tracks were created as follows:

I was given the GPS raw data for all the circuits. I wrote a program (in C) to interpret and convert that to a form that my GP4 sim required. So all the gradients, track widths and kerb positions and profiles, run off areas and fence positions are very accurate. That program created the mesh up to the fences of the circuit. I then supplied that "sim" mesh to MICROPROSE and they used it and added outside the fence features for the graphics.

Unfortunately, I don't know the answer to the .Dat file question, which is perhaps what you

really want to know. That was all done by the Microprose studio. I made an enquiry via some ex-Microprose contacts and I got this reply (but you have to bear in mind its been a while now and detail is hard to remember):

“we got the mesh from Geoff and imported it into 3dsMax as splines representing the track centre, edges, white lines, verges, fences and kerbs. We wrote a plug-in object creator for 3ds Max which was used to generate the geometry based on the splines before we added texture maps and UV coordinates. Once the drivable area was done, we built all the other (outside the fence) stuff as geometry and exported the whole thing as an ASCII file”.

In the external Tcam & replay views , the driver’s arms can be seen as being flat on the steering wheel . Can you tell the modding community where the 3d model for the arms is stored ? Some have suggested the main exe?

Again that was done by the Microprose studio. Another enquiry from me yielded this:

“The arms are 2d sprites, as are the legs, so what you’re looking for is 2d data. It looks like they are mapped on a poly or skewed for some of the 3rd person over the drivers head view so there may be a generated poly for them which would explain why a hunt ending up in the exe happened. In GP4, the cockpit was a separate mesh from the car and the cockpit controls were 2d and the driver was all 2d (in the cab) apart from the helmet which was 3d.”

Are there any tools used to edit create physics /CC line/ sounds etc that you could make available for the Modding community ?

I don’t have any stand-alone tools for things like that. I did special builds of GP4 for those jobs. The sound code was done by the studio, though we had an interface so the physics code could send requests for sound and control the sounds dynamically while they were playing.

If you were making Grand Prix 4 today what would you do differently or improve upon?

I think I did make a list once. The biggest change I should make would be to work less hours a week.

question 6 :

Are you still a fan of Formula One? And are you following any driver in particular atm?

I skipped a few years after I stopped working on it but found I always got interested if there was a decent battle going on for the drivers’ championship. I like Hamilton’s charging attitude. It reminds me of Nigel Mansell who I always found entertaining as a driver.

question 7 :

With some game studios today employing former modders to create their content such as car and tracks , example Simbin. others have taken to the likes of Kickstarter to fund their projects . Would you ever consider assembling a small team and going the Kickstarter route to start a new Racing sim project ?

I don't know. The idea of those deadlines and long hours makes me shudder. It sounds like a lot of fun, but I know that some of it isn't.

question 8 :

Big names such as Iracing and Assetto Corsa now use laser scanned cars and tracks in their titles.. What are your thoughts on this current method of recreating the real life counterparts to deliver what they call the nearest you can get to racing the car or track put in the hands of the Virtual sim racing?

It sounds great if it works.

question 9 :

do you feel that you completed your Grand Prix series with the fourth Installment or do you have an inkling that perhaps a fifth title would complete the set and then a firm line can be drawn under it ?

I wanted to do GP5. Circumstances prevented that from happening. The reality is that you can't always get what you want.

question 10 :

If you choose to, which of your titles would you remake for a more modern PC audience?

Sentinel or Stunt Car Racer maybe.

question 11 :

what are your thoughts on the modding communities that still keep the Grand Prix series in the public eye with their mods and updates ? Do you from time to time visit any forums/sites to see what's happening in the world of Grand Prix 4 ?

Actually I was pleased that the modding community kept things alive, since the studio couldn't. I felt contractually I could not get involved myself but it was good to see. I have from time to time looked at the forums. Also YouTube seems to have a lot of stuff. I particularly liked some videos that were put up that had real footage on one side of the screen and GP4 on the other side, showing a lap from various circuits. You could really see how the sim was accurately matching the real life car as it brushed all the kerbs, and you could see how closely the circuits' graphical features were coinciding as well.

question 12 :

AI & Physics are still an area largely debated today in racing sims. And have been often called "Dark Arts ". References are still made to Grand Prix 4 for its AI.

Are you surprised that to date it seems no one has come close to developing an "AI" that can equal or better Grand Prix 4 's ?

The AI in GP4 was based on certain fundamental philosophies that I created in F1GP1 and continued to build on throughout the series. I also know that the most sophisticated AI can look pretty dumb if things just miss a logical test and end up in a situation not allowed for . I think it ended up in a pretty good state and remains something which I am still pleased with. Knowing what's involved I am not surprised that it challenges everyone who takes it on.

question 13 :

Are there any racing sims today that you have seen or tried that you like?

I tend to find that other racing games are tricky to control and I don't spend enough time learning the necessary skills to get much from it. I think the graphics in the Codemasters F1 game look very nice and are what I would have expected to be producing if we had continued as a studio.

Geoff I would like to thank you for taking the time to take part in this interview & I wish you & your family all the very best for the future .

You're welcome Jim.

Many thanks to **John Cook** of Bad Management LLP for his help in making this interview happen.