RESUME

Name: Pedro Fernando Gomez Fernandez
Telephone: +34 636767455
Email: pedrofe@gmail.com
Nationality: Spanish
Web: www.pedrofe.com

SUMMARY

Pedro Fernando Gomez Fernandez is a Spanish software engineer with over ten years of experience in top companies on video games and vfx industries. He has studied in Madrid, Germany, UK and USA focusing on advanced computer science but also on the artistic side of computer animation. Having a mixed technical and artistic background, he has helped artists to push their works to be world renowned.
Some of his research includes high performance computing, simulation and artificial intelligence. He is also responsible for introducing immersive stereoscopy computer generated rendering techniques that are already used in several studios around the world to create virtual reality experiences.
He is striving to develop new innovations and ideas that will push the virtual reality to new levels.

HIGHLIGHTS

Vr Camera   Arnold for Maya based lens shader that allows to render 3D scenes to VR formats.
                  http://miragami.com/vr_camera/

Laser Trainer VR Google Cardboard game. This is a technical demo demonstrating some baking visual techniques specific for virtual reality, including parallax between the different scene depths.
                  http://miragami.com/laser-trainer/

PROFESSIONAL ACTIVITY

2017-Present Miragami (Madrid, Spain): Founder
Investigate and develop new techniques to improve the creation of VR and AR contents. Collaborate in diverse projects from medical visualization in AR to training software in VR. Advice companies and universities about how VR/AR could help them.
http://miragami.com

2016-2017   Autodesk (Madrid, Spain): Senior Software Engineer
Supervise the tight integration of Arnold inside Maya, including XGen, VP 2.0 and all the upcoming Maya features.

2011-2016   Solid Angle (Madrid, Spain): Senior Software Engineer
Design, implementation, technical support and documentation of the Arnold renderer integration for Maya (MtoA). Working directly with customers to solve their specific needs.

2010   CueVaValiente (Madrid, Spain): Software Engineer
Design and implementation of a web application with the Dojo Toolkit, focusing on the User Interface and Experience

2005-2009   Electronic Arts Madrid (Madrid, Spain): Lead Integration Engineer
Planned and coordinated software projects to be delivered on tight deadlines, within budget and to the expected quality using SCRUM methodology.
Used and developed the EA European Integration tools and kept the code base maintained.
Bridged the gap between the coordination and the technical areas.

2002-2003   SONY (Stuttgart, Germany): Software Engineer
C++ development work in a speech recognition project at the Man Machine Interface department. Automate tasks using Perl.

EDUCATION

**2003-2004   EPCC, University of Edinburgh (UK):
MSc in High Performance Computing**
Distributed computing (Shared memory, message passing, POSIX threads), parallel decomposition, Grid services, numerical algorithms and performance programming.
Master Thesis: Research about distributing computation for the simulation of solid particles in a liquid.
http://www.pedrofe.com/wp-content/uploads/2014/07/EPCC_ThesisPaper.pdf

**2002-2003   University of Stuttgart (Germany):
5th year Telecom Engineer degree**
Master Thesis: Research about distributed computing in real time using an Artificial Intelligence methodology (Agent Oriented Programming.)
http://www.pedrofe.com/wp-content/uploads/2014/07/IAS_ThesisPaper.pdf

**1998-2002   Tech. Univ. of Madrid (Spain): Telecom Engineering School.
Telecommunications Engineering**
Involving computer networks and communications as well as electronic and physics. This is the university Centre with the highest GPA access in Spain.

**2007-2009   AnimationMentor.com (Online):
Advanced Studies in Character Animation**

COMPUTER SKILLS

Languages and programming: <u>C</u>, <u>C++</u>, <u>Python</u>, <u>Java</u>, OpenGL, SCons, Qt.

Distributed Computing Algorithms: <u>Agent programming</u>, <u>shared memory</u>, <u>message passing</u>.

High Performance Computing: <u>CUDA</u>, <u>OpenMP</u>, <u>MPI</u>, Java Threads, POSIX Threads.

Graphics Applications: <u>Arnold</u>, <u>Maya</u>, Nuke, Substance, Houdini, Renderman, Mental Ray.

Operating Systems: <u>Windows</u>, <u>OSX</u>, Linux/GNU, Solaris.

LANGUAGES

Spanish: Mother Tongue

English: Fluent

HOBBIES

Origami, inline skating, scale modeling, cinema, writing, photography, clay modeling, reading, comics.