# Keynote Talks / Palestras

# Da Ciência da Computação para o Mercado Internacional de Jogos Jeferson Valadares

Nesta sessão, Jeferson irá discutir a sua experiência no mercado internacional de Games. Bacharel e Mestre em Ciência da Computação, ambos focando em Games e Inteligência Artificial, Jeferson ingressou na indústria em 2000 através da fundação de sua própria empresa. Apesar de ter trabalhado em diversas plataformas ao longo dos anos, ele tem se focado em Mobile Games desde 2005. Em sua carreira, Jeferson trabalhou em vários títulos que foram sucesso de crítica e de vendas, assim como títulos para marcas como Dragon Age, Simpsons, EA Sports FIFA, Harry Potter, Need for Speed e vários títulos para a Hasbro, como Game of Life e Battleship. Atualmente na BANDAI NAMCO, trabalha com marcas como PAC-MAN, Dark Souls e Dragon Ball.

### Short Biography

Jeferson Valadares é VP de Desenvolvimento de Produto na BANDAI NAMCO Entertainment America. Brasileiro, ele é Bacharel em Mestre em Ciência da Computação, e começou a sua carreira na área de games em 2000 através da fundação de sua própria empresa. Antes de ir para a BANDAI ele trabalhou como líder de estúdio na Electronic Arts, BioWare, Flurry, Playfish e Digital Chocolate. Desde 2005 ele deixou o Brasil, e nos últimos dez anos morou em Helsinki, Londres, e agora reside em San Francisco.

## Microscopic Crowd Simulation Julien Pettré

This presentation introduces the main principles of microscopic crowd simulation. Microscopic approaches compute the motion at large scale of a crowd made of dense and numerous entities which results from the combination of the many local interactions between individuals. We explain the recent advances in the field, and more specifically some approaches based on artificial vision which give an attempt to reproduce the perception / action loop that drives human locomotion in dynamic environments. We finally present some applications for crowd simulation to animate large populations in large-scale interactive virtual worlds. We show how to adapt a crowd simulator to allow animating crowds beyond the limitations set by the complexity of crowd simulation algorithms and the available computational resources.

#### Short Biography

Julien Pettré is research scientist at INRIA since 2006. He obtained a PhD in Robotics in 2003 from the University of Toulouse III in France, prepared under the direction of Jean-Paul Laumond. He then obtained a Marie-Curie IEF grant to spend a 18 months post doc at VRlab, EPFL, Switzerland, headed by Daniel Thalmann. Julien Pettré started his research activities on motion planning for digital humans moving in their virtual environment. He then took interest in virtual crowds. He designed efficient crowd animation techniques to massively populate virtual worlds. He studied real humans moving in crowds in the aim of designing realistic simulation algorithms as well as to provide evaluation methodologies. He finally takes interest in Virtual Reality as an efficient research tool to study human behaviors by setting them in interaction with virtual crowds.

# Interacting Naturally, Reconstructing and Augmenting our World Miguel Sales Dias

In this presentation I'll be addressing the current experiments that myself and my team are carrying in the area of Human-Computer Interaction, Virtual and Augmented Reality, focusing on ways to reconstruct, classify and augment our living and working environment, and on how to naturally communicate with such environments, using natural and multimodal HCI modalities and their fusion, such as speech, gesture (including gesture for sign language recognition), gaze and biometry, this last one used to derive human emotional states. I'll be illustrating the use of such multimodal HCI in augmentative communication, architecture design and ambient assisted living scenarios.

#### **Short Biography**

José Miguel Sales Dias holds a bachelor (1985) and a master (1988) in Electrical and Computer Engineering (IST-UTL, Portugal) and a PhD in Computer Graphics and Multimedia (1998) from ISCTE-IUL where he was an Associated Professor until 2005, holding currently an Invited Associated Professor position, teaching and conducting research in Computer Graphics, Virtual and Augmented reality, Ambient Assisted Living and Multimodal Human-Computer Interaction. Since November 2005, he is the Director of the first European R&D Centre in Speech and Natural User Interaction Technologies of Microsoft Corporation in Portugal (Microsoft Language Development Center, MLDC, http://www.microsoft.com/pt-pt/mldc/). He is regularly commissioned by the European Commission for R&D project evaluations and reviews. Author of 1 patent, author, co-author or editor of 11 scientific books or journal editions, 12 indexed papers in international journals, 26 chapters in indexed international books, 144 other publications, workshops or keynotes in international conferences. Since 1992 he has participated or participates in 33 International R&D projects (ESPRIT, RACE, ACTS, TELEMATICS, TEN-IBC, EUREKA, INTERREG, FP5 IST-IPS, FP6 IST, ESA, Marie Curie, AAL, ACP), and 15 National (FCT, QREN, NITEC, POSC, POCTI, POSI, ICPME, TIT). He obtained 5 scientific prizes. He is a member of ACM SIGGRAPH, Eurographics, ISCA and IEEE; editorial boards of several journal; several Program Committees of National and International conferences in Computer Graphics, Virtual and Augmented Reality, Speech technologies, Accessibility and Ambient Assisted Living. He was President of ADETTI, an ISCTE-IUL associated R&D research center. He was Vice-president and Secretary of the Portuguese Group of Computer Graphics, Eurographics Portuguese Chapter. Born at December 1st 1961, happy father of three children, two girls and one boy.