



The Fourth International Conference on the

Foundations of Digital Games

Evolved from the Conference on Game Development in Computer Science Education (GDCSE)

April 26-30, 2009

On-board the Disney Wonder cruise ship
Departing from Port Canaveral, Florida, USA

Submission Deadlines

December 19, 2008
Full papers & posters

December 29, 2008
Doctoral Consortium
proposals

Corporate Sponsors

Microsoft®
Research



CALL FOR PAPERS

FDG '09, the International Conference on the Foundations of Digital Games, is a focal point for academic efforts in all areas of research and education involving computer and console games, game technologies, game play and game design. Previously known as Academic Days on Game Development in Computer Science Education (GDCSE 08), this year's conference expands its scope to encompass all aspects of Computer Science focused game research, along with game-oriented education research, and game studies and game design research. The goal of the conference is the advancement of the science of digital games, including new game technologies, capabilities, designs, applications, educational uses, and modes of play.

The conference will be held aboard the Disney Wonder cruise ship, departing from and returning to Port Canaveral, FL with port calls in the Bahamas and at Disney's private island, Castaway Cay. FDG 2009 will include presentation of peer-reviewed papers, invited talks by high-profile industry and academic leaders, hands-on tutorials and topical panels on a range of subjects related to games research and education. We invite researchers and educators to share insights and cutting-edge results relating to game technologies and their use.

SUBMISSIONS

FDG 2009 will accept both full paper and poster submissions (the details of each are described below). To encourage submissions across a range of topics, this year's program includes six distinct theme areas. Authors may choose to submit their papers to the general conference or to a specific theme area of particular relevance. The conference themes are a) artificial intelligence, b) computer science and games education, c) databases, d) game studies/game design, e) graphics and interfaces and f) networking and security. Papers that fall outside these topic areas are strongly encouraged and should be submitted to the general track. All submissions will be rigorously peer reviewed for their technical merit, significance, clarity and relevance to the advancement of the sciences of games. All full papers must describe a completed unit of work and show rigorous and compelling evaluation of the ideas they present. Poster submissions should describe novel work in progress that is not at the same level of research maturity as a full submission.

PAPERS AND POSTERS

All accepted paper and poster submissions will be published in the conference proceedings, which will be available on a USB drive. For a paper or poster to appear in the proceedings, at least one author must register for the conference by the deadline for camera-ready copy submission. One author of each accepted submission will be provided with a special registration package that allows them to register at the early registration rate. Papers from previous years' conferences have been included in the ACM Digital Library and we anticipate that all paper, poster, and doctoral consortium publications from this year's conference will appear there as well. Conference organizers are working with the ACM to obtain in-cooperation sponsorship status, and anticipate approval in late October 2008.

Electronic paper and poster submission is required. Authors should submit their papers at the conference submission site, <http://www.easychair.org/conferences/?conf=icfdg2009>. Both paper and poster authors must submit their papers by 11PM Pacific time on December 19, 2008. Papers must not exceed eight pages and poster submissions must not exceed two pages. All submissions must comply with the official ACM proceedings format using one of the templates provided at <http://www.acm.org/sigs/pubs/proceed/template.html>. FDG 2009 will not accept any paper that, at the time of submission, is under review for or has already been published or accepted for publication in a journal or another conference. This restriction does not apply to submissions for workshops and other venues with a limited audience.

THEME AREA TOPICS

Authors whose papers align with a particular theme area should choose to submit their paper under that theme. Theme areas for FDG 2009 are defined broadly using the descriptions here:

Artificial Intelligence

We solicit papers on artificial intelligence research that provides novel solutions to traditional game AI problems (e.g. path planning, camera control, terrain analysis, user modeling, tactical/strategic decision making, etc.), supports novel game concepts or gameplay elements (e.g. interactive drama, narrative/character development, NPC belief/attitude/emotion modeling, etc.), provides automated or semi-automated solutions to game production challenges (e.g. game design, content creation, testing, procedural animation, etc.), or describes the integration of AI technologies (e.g. machine learning, logical inference, planning, etc.) into game AI architectures.

Computer Science and Games Education

The Computer Science and Games Education Theme Area invites researchers and educators to submit papers illustrating the latest advances and innovation in curricula for games and computer science, in both formal and informal educational contexts. All papers must show rigorous and compelling evaluation. Topics of interest include, but are not limited to: game design and development curricula, effective practices and infrastructure for the use of games and game technologies in Computer Science courses and programs, Web-based (adaptive) educational games and interdisciplinary collaboration among computer scientists and others to create games in educational contexts.

Databases

The database track is soliciting papers with either novel applications of database techniques to computer games or with novel database techniques especially designed for digital games. Topics include database engines, query processing, and query optimization for games workloads; declarative languages for game programming; distributed database techniques and consistency models for networked games; data management for games that cross physical and virtual worlds.

Game Studies | Game Design

The Game Studies | Game Design theme seeks reports of creative design practice and methods, as well as the exploration and development of innovative gameplay forms and mechanics. Research on new models for player involvement, design as co-construction with players and their communities, and iterative player-centered design are also very welcome. Within the domain of game studies more generally, submissions are welcome in the areas of player experience, game ontology, the social and cultural aspects of gameplay, cross-cultural analyses, networked play (including consoles), game aesthetics and criticism, casual and serious gaming. Submissions that provide a rigorous analysis of new or emerging phenomena are of strong interest.

Graphics and Interfaces

The graphics and interfaces theme seeks papers on all aspects of computer graphics and user interfaces that are specifically related to digital games, including but not limited to: animation; modeling; rendering; 2D and 3D user interfaces; collaborative user interfaces; mobile user interfaces; tangible user interfaces; design of (interfaces for) Web 2.0 game focused web applications; integration of web-based and computer/console based game worlds; augmented reality and virtual reality; and novel interaction devices and displays.

Networks and Security

We invite submissions that focus on the many aspects of constructing networked games and networked game services. Submissions that fall under the following areas are encouraged: networked game architectures, network protocol design for games, latency issues, lag compensation, and synchronization methods, mobile and/or resource-constrained games, software and middleware support for developing networked games, content delivery and adaptation, services for supporting networked games, cheat detection techniques, cheat prevention via secure game design and the networking and security aspects of Web-based games and game portals.

IMPORTANT DATES

December 9, 2008	Early registration deadline
December 19, 2008	Full paper and poster submission deadline
December 29, 2008	Doctoral Consortium proposal submission deadline
January 30, 2009	Paper, poster, and Doctoral Consortium notifications of acceptance/rejection
February 9, 2009	Regular registration deadline
February 20, 2009	Camera-ready copy due. Presenting author conference registration deadline
March 9, 2009	Late registration deadline
April 26-30, 2009	2009 Int'l Conference on Foundations of Digital Games
April 30, 2009	Doctoral Consortium

FDG DOCTORAL CONSORTIUM

The FDG Doctoral Consortium provides an opportunity for a limited group of Ph.D. students to discuss and explore their research interests and career objectives with a panel of established games researchers and industry professionals. The consortium has the following objectives: (1) to provide a setting for mutual feedback on participants' current research and guidance on future research directions; (2) develop a supportive community of scholars and a spirit of collaborative research; (3) support a new generation of researchers with information and advice on academic, research, industrial, and nontraditional career paths; and (4) contribute to the conference goals through interaction with other researchers and participation in conference events.

The Doctoral Consortium will be held on April 30th, 2008, the last day of the FDG conference, and will be hosted at the Orlando offices of Electronic Arts' Tiburon Studios. Attendance will be limited to a) FDG Program and Organizing Committees (who will serve as reviewers and discussants for student presentations), b) graduate students whose proposals are accepted for presentation and c) a limited number of additional graduate students as space is available. Students whose submissions to the Doctoral Consortium are accepted for presentation will receive complimentary conference registration and a fixed allowance for travel/housing.

The deadline for application to the Doctoral Consortium is December 29, 2009. For more details, see the Doctoral Consortium Call for Papers available on the FDG web site or contact Ian Horswill, Doctoral Consortium Chair, at ian@cs.northwestern.edu.

FDG 2009 ORGANIZING COMMITTEE

Conference Chair

Jim Whitehead, *Univ. California, Santa Cruz*

Finances Chair

Magy Seif El-Nasr, *Simon Fraser Univ.*

Local Arrangements Co-Chairs

Kent Foster, *Microsoft Corporation*

G. Michael Youngblood, *Univ. North Carolina, Charlotte*

Program Chair

R. Michael Young, *North Carolina State Univ.*

Doctoral Consortium Chair

Ian Horswill, *Northwestern Univ.*

Webmaster

Bruce Gooch, *Univ. of Victoria*

FDG 2009 PROGRAM COMMITTEE

Program At-Large Members

Ian Bogost, *Georgia Institute of Technology*

Pat Langley, *Arizona State Univ.*

Nick Montfort, *Massachusetts Institute of Technology*

Mark Overmars, *Utrecht University*

Ian Parberry, *Univ. of North Texas*

Yusuf Pisan, *Univ. of Technology Sydney*

Zoran Popovic, *Univ. of Washington*

Walt Scacchi, *Univ. of California, Irvine*

Gita Reese Sukthankar, *Univ. of Central Florida*

Bill Swartout, *USC/ICT*

R. Michael Young, *Program Chair*

North Carolina State Univ.

Program Theme Area Members

ARTIFICIAL INTELLIGENCE

Theme Co-Chairs

Simon Lucas, *Univ. of Essex*

Michael Mateas, *Univ. of California, Santa Cruz*

Julian Togelius, *IDSIA*

Ian Horswill, *Northwestern Univ.*

COMPUTER SCIENCE AND GAMES EDUCATION

Theme Co-Chairs

Tiffany Barnes, *Univ. of North Carolina, Charlotte*

Michael Zyda, *Univ. of Southern California*

Andrew Phelps, *Rochester Institute of Technology*

Wanda Dann, *Carnegie-Mellon Univ.*

DATABASES

Theme Chair

Johannes Gerhke, *Cornell Univ.*

Beng Chin Ooi, *National Univ. of Singapore*

Walker White, *Cornell Univ.*

GAME STUDIES | GAME DESIGN

Theme Chair

TL Taylor, *IT Univ. Copenhagen*

Doug Thomas, *Univ. of Southern California*

Tracy Fullerton, *Univ. of Southern California*

GRAPHICS AND INTERFACES

Theme Chair

Steve Feiner, *Columbia Univ.*

Bruce Gooch, *Univ. of Victoria*

Jessica Hodgins, *Carnegie-Mellon Univ.*

NETWORKING AND SECURITY

Theme Chair

Wu-Cheng Feng, *Portland State Univ.*

Mark Claypool, *Worcester Polytechnic Institute*

Travis Schluessler, *Intel Corporation*

FDG STEERING COMMITTEE

John Laird, *Univ. of Michigan*

Ian Parberry, *Univ. of North Texas,*

Jim Whitehead, *Univ. of California, Santa Cruz*

R. Michael Young, *North Carolina State Univ.*

ADDITIONAL INFORMATION

Please see www.foundationsofdigitalgames.org for additional information, or email Jim Whitehead, Conference Chair, at ejw@cs.ucsc.edu.