

# Jérémie Allard



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Born 1979, Chatenay, France

## Research Interests

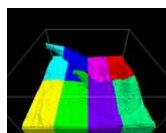
High Performance Computing, Virtual Reality, Computer Graphics

## Education

- 2002 – *present* INPG – Grenoble, France  
**PhD in Computer Sciences**  
Advisor: Bruno Raffin  
Subject: Interactive applications and distributed visualization: resource allocation and computation coordination  
*Expected: 10/2005*
- 2001 – 2002 University of New Orleans – Louisiana, USA  
**M.S. Computer Sciences**  
*student exchange program, DEA Université d'Orléans.*  
*GPA: 4.0*
- 1997 – 2001 Université d'Orléans – Orléans, France  
Maitrise Informatique (**B.S. Computer Sciences**)  
*Rank: 1 / 29*

## Publications

### International Conferences



#### **A Shader-Based Distributed Rendering Framework**

*Jérémie Allard, Bruno Raffin*

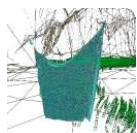
IEEE Visualization 2005, October 2005, Minneapolis, Minnesota, USA



#### **FlowVR: a Middleware for Large Scale Virtual Reality Applications**

*Jérémie Allard, Valérie Gouranton, Loïck Lecointre, Sébastien Limet, Emmanuel Melin, Bruno Raffin, Sophie Robert*

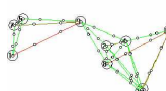
Euro-Par 2004, August 2004, Pisa, Italia



#### **Coupling Parallel Simulation and Multi-display Visualization on a PC Cluster**

*Jérémie Allard, Bruno Raffin, Florence Zara*

Euro-Par 2003, August 2003, Klagenfurt, Austria



#### **A User Level Framework for Ad hoc Routing**

*Jérémie Allard, Paul Gonin, Mino Singh, Golden G. Richard III*

IEEE International Conference on Local Computer Networks (LCN 2002), November 2002, Tampa, Florida, USA



#### **Net Juggler : Running VR Juggler with Multiple Displays on a Commodity Component Cluster**

*Jérémie Allard, Loïck Lecointre, Valérie Gouranton, Emmanuel Melin, Bruno Raffin*

IEEE VR 2002, March 2002, Orlando, Florida, USA



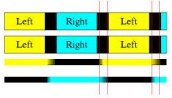
**Running Large VR Applications on a PC Cluster: the FlowVR Experience**

*J r mie Allard, Edmond Boyer, Cl ment M nier, Bruno Raffin*  
IPT & EGVE Workshop 2005, October 2005, Aalborg, Denmark



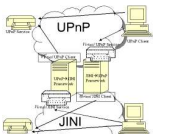
**Marker-less Real Time 3D Modeling for Virtual Reality**

*J r mie Allard, Edmond Boyer, Jean-S bastien Franco, Cl ment M nier, Bruno Raffin*  
International Immersive Projection Technology Workshop (IPT) 2004, May 2004, Ames, Iowa, USA



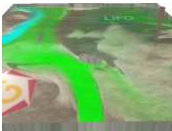
**Softgenlock: Active Stereo and Genlock for PC Cluster**

*J r mie Allard, Val rie Gouranton, Guy Lamarque, Emmanuel Melin, Bruno Raffin*  
IPT/EGVE'03 Workshop, May 2003, Zurich, Switzerland



**Jini Meets UPnP: An Architecture for Jini/UPnP Interoperability**

*J r mie Allard, Vivek Chinta, Srivatsa Gundala, Golden G. Richard III*  
International Symposium on Applications and the Internet (SAINT 2003), January 2003, Orlando, Florida, USA



**Parallelizing Pre-rendering Computations on a Net Juggler PC Cluster**

*J r mie Allard, Val rie Gouranton, Emmanuel Melin, Bruno Raffin*  
IPT 2002, March 2002, Orlando, Florida, USA

## Tutorials

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**Commodity Clusters for Immersive Projection Environments**

*J r mie Allard, Marcio Calixto Cabral, Camille Goudeseune, Hank Kaczmarek, Bruno Raffin, Benjamin Schaeffer, Luciano Soares, Marcelo Knorich Zuffo*  
Course 18, SIGGRAPH 2003, August 2003, San Diego, California, USA

## Master Thesis

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**Functional and Structural Recursion in Spreadsheet Languages**

*J r mie Allard. Advisor: Markus Montiguel*  
University of New Orleans, August 2002, New Orleans, USA

## Research and Professional Experience

- 07/2003 Consulting.  
Visionair 3D. Tilburg, The Netherlands.  
<http://www.visionair3d.com/>
- 01/2002 – 07/2002 Research Assistant.  
Visual Programming Group, CS Dept. University of New Orleans.  
<http://www.cs.uno.edu/newsletter/spring02/spc02.html>
- 03/2001 – 06/2001 Research Internship.  
Scalable High Performance Virtual Reality Project, LIFO, Universit  d'Orl ans.  
<http://netjuggler.sourceforge.net/>

## Teaching Experience

- 01/2005 Master 2 Research (M.S.) – Universit  d'Orl ans  
Parallel Virtual Reality
- 10/2002 – 10/2005 Licence 1 (B.S.) – UPMF  
Introduction to Computer Sciences
- 10/1999 – 06/2001 Licence 1-2 (B.S.) – Universit  d'Orl ans  
C.S. Student tutoring

## Skills

Languages French, English

Programming Languages C/C++, JAVA, Perl, Python, PHP, Shaders (NV, ARB, Cg, GLSL)

Tools OpenGL, DirectX, MPI, VTK, Linux Kernel, RTAI/RTLinux

Misc. Cluster Administration, Workgroup Collaborative Tools Managment (Wiki, CVSTrac)

## Research Projects

Cyber-II Real-time Integration of a Person in a Virtual Environment with Interactions

2003 – *present* INRIA, LIRIS

Funded by ACI «Masse de données» – French Department of Research

<http://artis.imag.fr/Projects/Cyber-II/>

Geobench Distributed Immersive Visualization and Haptic Interactions Applied to (Geo-)Scientific Data.

2002 – 2005 BRGM, CEA, INRIA, LIFO, TGS

Funded by RNTL – French Department of Research

Videos of recent results: <http://www-id.imag.fr/~allardj/videos/>

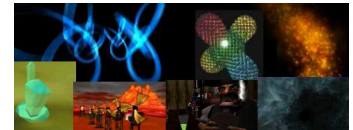
## Personal Projects

Various open-source OpenGL programs and real-time multimedia animations.

<http://hufo.planet-d.net/>

Appear in the book **OpenGL Game programming**, Kevin Hawkins, Dave Astle, Andre LaMothe, Premier Press, May 2002.

To appear in the book **Computer Graphics Using OpenGL**, Francis S. Hill Jr., Stephen M. Kelley Jr., 3rd Edition, Prentice Hall.



## Awards

Winner, Dr. Jobb's Journal Mars Rescue Programming Contest – January 2005

<http://www.frank-buss.de/marsrescue/>

First Place, NVIDIA/Discreet Shaders Contest – June 2001



## Academic Activities

Reviewing Committee - Workshop on Commodity Clusters for Virtual Reality (VR-Cluster'03)

Local Organizer - Eurographics Symposium on Parallel Graphics and Visualization (EGPGV04)

Reviewer - Computer Graphics and Geometric Modeling TSCG'2005

## Memberships

NVIDIA Registered Developer

ACM Special Interest Group in Computer Graphics (SIGGRAPH)

## Personal Interests

Reading (S.F.), Game/Demo programming, Skiing, Hiking