

# Application BASTRI

## Fiches Equipes

### IPARLA (SR0001PR)

Visualisation et manipulation de données complexes sur terminaux mobiles communicants

IPARLA □ ( POTIOC (SR0496BR) , MANAO (SR0497PR) )

**Statut:** Terminée

**Responsable :** Christophe Schlick (Par intérim)

**Mots-clés de "A - Thèmes de recherche en Sciences du numérique - 2023" :** *Aucun mot-clé.*

**Mots-clés de "B - Autres sciences et domaines d'application - 2023" :** *Aucun mot-clé.*

**Domaine :** Perception, cognition, interaction

**Thème :** Interaction et visualisation

**Période :** 06/11/2003 -> 31/12/2011

**Dates d'évaluation :** 21/10/2010

**Etablissement(s) de rattachement :** U. DE BORDEAUX, CNRS, ENSEIRB

**Laboratoire(s) partenaire(s) :** LABRI (UMR5800)

**CRI :** Centre Inria de l'université de Bordeaux

**Localisation :** Centre Inria de l'université de Bordeaux

**Code structure Inria :** 081014-0

**Numéro RNSR :** 200318251E

**N° de structure Inria:** SR0001PR

### Présentation

Mobility is a major (r)evolution for current interactive systems. During the last decade, a large range of electronics devices have been developed, that allow the user to benefit from computing resources in mobile settings. The last generations of cell phones, personal digital assistants, portable game devices as well as ultra-mobile computers, combine embedded programmable CPUs and sometimes even GPUs, with several flavors of wireless communication capabilities. Such Mobile and Connected Devices (MCDs) offer the opportunity to use a wide variety of end-user software applications over client/server infrastructures. In the field of 3D computer graphics, MCDs induce specific constraints for the incoming data flow (e.g. reduced horsepower for CPU/GPU, small screens) as well as for outgoing data flow (e.g. limited input devices). These technological constraints naturally decrease the cognitive immersion of the user, which affects the performance and the acceptance of the end-user 3D applications. At the creation of the IPARLA project, and during its first years (2003-2006), MCDs were an important part of our research context, as many software developments and scientific publications produced during this first period were specifically oriented towards MCD technology. However, in 2006 we stated our intention to open this research context, by spreading the mobility aspect on the whole processing pipeline including acquisition, processing, streaming and interactive manipulation of 3D data by some end-user.

### Axes de recherche

Our actual main goal is to design flexible solutions that allow as-seamless-as-possible adaptation to a wide range of various interaction, computation and/or visualization environments. For example, we want to design concepts that enable to use the same application on a MCD, a standard PC or in a virtual reality center. In order to reach this goal, one of the specificities of the IPARLA project is to combine techno-centered and human centered approaches. Most of our results try to produce scalable and multi-resolution data structures that offer progressive streaming for large amounts of 3D data within various client-server architectures, while offering intuitive user interaction or increased cognitive immersion.

### Relations industrielles et internationales

#### Contact

- **Responsable :** Christophe Schlick
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#### En savoir plus

- Site de l'équipe
- Site sur [inria.fr](http://inria.fr)
- Derniers Rapports d'Activité :

#### Documents sur la structure

- Intranet
- Privés

#### Décisions

- **3991** (13/11/2003) : création
- **5309** (05/01/2007) : prolongation
- **7533** (28/10/2010) : cessation du responsable
- **7534** (28/10/2010) : nomination responsable
- **7632** (12/01/2011) : prolongation
- **8097** (28/10/2011) : prolongation
- **8374** (03/01/2012) : fermeture

#### Localisation

- **Adresse postale :** Centre Inria de l'université de Bordeaux 200 Avenue de la Vieille Tour 33405 Talence France
- **Coordonnées GPS :** 44.808, - 0.6

