



KEY TECHNOLOGIES

Data Security and Transmission

Software development and its widespread corporate and individual use raise the issue of software assessment. Software efficiency has to be measured against two parameters (required computing time, memory workspace used). The Algorithmic Team at the GREYC is tackling the following fields:

- ▶ Three aspects of computer data security: encryption, error correction and document compression (with a focus on document transmission)
- ▶ Biocomputing (processing the human genome)
- ▶ Meeting the constraints of decision-making support
- ▶ Checking software compliance with specifications

HUMAN POTENTIAL

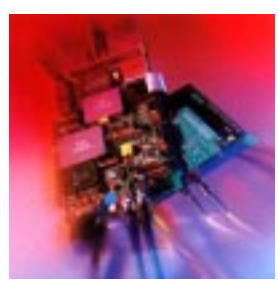
The GREYC Algorithmic Team (10 full-time, 10 doctoral candidates) working with mathematicians from the SDAD (Structures Discrètes et Analyses Diophantiennes, discrete structure and Diophantine analyses), (3 full-time, 3 doctoral candidates)



EQUIPMENT

The laboratory with the software environment is an invaluable tool for this kind of work. The other available tools are:

- ▶ A broadband network (VIKMAN connected to the RENATER network)
- ▶ CALINS (CRAY computer at the CYCERON laboratory)



Conception : Normandie Développement - June 2002 / Photographies: Greyc - ISMIRA Caen - Normandie Développement

METHODS

The methods draw on two disciplines, based on the joint work of mathematicians and computer scientists.

Achievements:

The search for cryptology schemas deemed to be secure

The development of coding and cryptography interaction

The fine analysis of the data structures used for biocomputing and compression

SUPPORT TO BUSINESS SET-UP PROJECTS IN BASSE NORMANDIE

The Basse Normandie Region has rolled out all its resources to support business projects in the following areas:

- ▶ General funding
- ▶ Business project support
- ▶ Training programs
- ▶ Corporate user services at operations site
- ▶ Technology transfer to companies: www.gravir.org and www.rdt-bn.org

CONTACTS

For general technological or scientific information

■ **Mme Brigitte VALLEE**
Laboratoire GREYC
Université de Caen Campus II
 14032 CAEN CEDEX FRANCE

Phone: **33 (0)2 31 56 74 81**
 Fax: 33 (0)2 31 46 73 30
 email : brigitte.vallee@info.unicaen.fr

■ **M. Patrice ENJALBERT**
Département d'Informatique
université de Caen
 14032 CAEN CEDEX FRANCE

Phone: **33 (0)2 31 56 74 87**
 Fax: 33 (0)2 31 46 73 30
 email: Patrice.enjalbert@info.unicaen.fr

For economic or industrial information

■ **Normandie Développement**
 57 Avenue de Bretagne
 BP 1083
 76173 ROUEN CEDEX 1

Phone: **33 (0)2 35 03 06 04**
 Fax: 33 (0)2 35 03 07 86
 email: ndrouen@normandydev.com

COMMITTED COMPANIES...

- ▶ **France Télécom R&D** (cryptology, chip cards) - <http://www.rd.francetelecom.fr/>
- ▶ **CEV** (chip card software engineering) - <http://www.cev-sa.com/>
- ▶ **CIRCUM** (secure networks and e-business) - <http://www.circum.fr/>
- ▶ **DPCI** (electronic filing, data transmission) - <http://www.dpci.fr/>
- ▶ **EOLRING INTERNATIONAL** (shared and versatile optic systems data transfer) - <http://www.eolring.fr/>
- ▶ **LOYALTYSOFT** (card systems for customer loyalty products and services) - <http://www.loyaltysoft.com>
- ▶ **STEPMIND** - (integrated radio circuits) <http://www.stepmind.com>
- ▶ **VALIOSYS** (software for computer program validation) - <http://www.valiosys.com/>
- ▶ **FIME** (cash card reader tests) - <http://www.fime.com>
- ▶ **NETCENTREX** (voice transmission over the Internet) - <http://www.netcentrex.net>
- ▶ **HIGHDEAL** (management software for Internet Business offerings) - <http://www.highdeal.net> etc...

For further information:

Browse our website to find out all about the many opportunities in Normandy, at www.normandydev.com or send an email to ndcaen@normandydev.com or ndrouen@normandydev.com

