

Computing Science Laboratory

Instituto de Computación
Universidad de la República
Montevideo - Uruguay

Groups

- Compilers and Languages for Computer Graphics
- Formal Methods
- OO and Software Architectures
- Algorithms
- Computer Science Education
- Security

Compilers and Lang. for Comp. Graphics

- Typed Windows
- C5 language (C extended with dynamics)
- H5 language

Formal Methods

- Programming logics
- Proof assistants based on type theory
- Functional programming
 - program transformation
 - algebra of programming
 - program fusion
 - effects: monads/comonads/etc
 - HYLO system (and extensions)
 - generic programming

Formal Methods (cont.)

- Formal verification of reactive systems
 - verification of real-time imperative programs (pacemakers).

OO and Software Architectures

- OO design
- UML, design methodologies, etc.
- AOP

Algorithms

- Analysis of algorithms
- Cryptography
- Information theory