

● APPLIED MATHEMATICS IN COMPUTING



INTRODUCTION

The research group Applied Mathematics in Computing, founded in 1995, of the Department of Applied Mathematics of the E.T.S.I. Informática (Higher Technical School of Engineering, Dep. Informatics) is specialized in the study of formal methods for the construction of deductive reasoning systems (artificial intelligence). The scientific team has an expertise in developing expert systems capable of deducing possible solutions when presented with practical and/or real cases. The software is quite resourceful and offers a range of applications in medicine or jurisprudence, not only as a general means of professional support, but also by providing a higher impartiality between possible courses of action. Latest research has been centered on the development of semantics websites. An individual visiting such a site will be guided by an intelligent set of questions in order to present the information, the person was looking for. Applications for this research could be used in the analysis of complex databases, deducing distinct entries, where to find objects, preferred choices, etc.

RESEARCH TOPICS

- Automated theorem proving in non-classical logics.
- Formal computational methods. Applied to databases.
- Numerical methods in mathematical programming.
- Application of line theories to computer networks.
- Category theories and abstract algebras.

SCIENTIFIC-TECHNICAL SERVICES

- Technical advice for planning and calculations for the design of communication towers.
- Advisor for the design of intelligent software.

RESEARCH GROUP LEADER: AGUSTIN VALVERDE RAMOS
PAI CODE: TIC115

CONTACT

PHONE: 952 132 878 | FAX: 952 132 766

E-MAIL: a_valverde@ctima.uma.es | WEB: <http://www.gimac.uma.es>

ADDRESS: Dpto. Matemática Aplicada. E.T.S.I. Informática. Campus Teatinos, s/n. 29071- Málaga