

ErGA: Lab of Geometric and Algebraic Algorithms

<http://erga.di.uoa.gr/>

ErGA, the Lab of Geometric and Algebraic Algorithms, was founded in 2002. It is headed by Prof. Ioannis Emiris and currently includes 3 scientific collaborators, 4 PhD and some Master's students. Previous members include two PhD student (currently Post-Docs) and 3 Post-Docs.

The Lab conducts research in computational geometry (visibility, Voronoi diagrams, robustness and implementation, curved objects, polyhedral geometry), algebraic algorithms (real solving, polynomial systems, resultant methods, sparse elimination, structured matrices), scientific computing, (linear algebra, symbolic-numeric computation, computer arithmetic), and the related software development (C/C++, Python, Maple). The main applications are in CAGD (implicitization, arrangements of curved objects), robotics (calibration, kinematics), and structural bioinformatics (secondary and tertiary structure, pharmacophore identification).

The Lab has a number of national research and industrial projects. It has several collaborations at the international level, most notably with INRIA, France. It has participated in the European STREP FET-Open project ACS (Algorithms for Complex Shapes, 2005-2008), in which it coordinated the Software workpackage, and currently participates in the Marie Curie Initial Training Network SAGA (Surfaces, Algorithms, and Geometric Applications, 2008-2012). The group has co-organized a number of international events, such as the International Workshop on Computer Algebra in Scientific Computing (CASC 2005), the European Workshop on Computational Geometry (EuroCG 2006), and the ACS Review and Open Research Workshop (2006).

Department of Informatics and Telecommunications

The Department of Informatics and Telecommunications (<http://www.di.uoa.gr/>) was created in 1986, with the first graduates obtaining their Degrees in 1990. The Department expects to have 43 full-time faculty members at the end of 2009. In 2009, there are about 2000 enrolled undergraduates students (4-year curriculum), about 700 Masters students in all 7 programs administrated by the Department or where the Department participates, and about 250 PhD candidates. There are today about 20 technical and administrative employees.

The research and teaching activities of the Department cover most areas of Computer Science and Telecommunications. The Department is organized in 3 sectors: Theoretical Informatics, Computer systems, and Communications and signal processing. Undergraduate education has a nominal length of 4 years, leading to a Bachelor's degree. The Department is very active in graduate-level education, and offers a Master's program with 6 academic directions. Moreover, the Department coordinates 3 Master's programs,

which are joint with other Departments or Institutions. Lastly, the Department participates in 3 Master's programs. The Department is very active in terms of European and national research and industrial projects, with an average of 22 new projects yearly, in the past 5 years.

National Kapodistrian University of Athens

The National and Kapodistrian University of Athens (NKUA) (<http://www.uoa.gr>) is the largest and oldest University in Greece. Created in 1837, it hosts today about 70,000 students, 2,500 faculty, 1,000 administrative personnel. The University is composed of 35 Departments, organized in 5 Schools, as well as some independent Departments. The Schools are: Sciences; Health Sciences; Law, Economics and Political Science; Philosophy and Humanities; Theology. The School of Sciences includes 6 Departments: Informatics and Telecommunications, Mathematics, Physics, Biology, Chemistry, Geology and Geoenvironment.