



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **David Gianazza**

Telephone(s) +33 562259544 (office) Mobile: ---
Fax(es) +33 562259599
E-mail david.gianazza@aviation-civile.gouv.fr
Nationality French
Date of birth 12/12/66
Gender Male

Work experience

Dates	Currently, since January 2012
Occupation or position held	Associate professor at the MAIAA lab. of the french university of civil aviation (ENAC Toulouse, France)..
Main activities and responsibilities	Research and teaching Since 2008, member of the "Institut de Recherche en Informatique de Toulouse" (IRIT) -- Parallel Algorithms and Optimisation group (APO) Research topics related to optimization and machine learning techniques applied to Air Traffic Management problems such as ground-based aircraft trajectory prediction, conflict detection and resolution
Name and address of employer	SESAR european programme, WP 4.7.1, 10.8.1 (Expertise) Ecole Nationale de l'Aviation Civile 7 avenue Edouard Belin, 31055 Toulouse Cedex 4, France
Type of business or sector	Higher education / research
Dates	September 2010 - December 2011
Occupation or position held	Head of the Planning, Optimization, and Modeling Unit, at the R&D department of DSNA/DTI <i>Note: DSNA ("Direction des Services de la Navigation Aérienne") is the French air navigation services provider.</i>
Main activities and responsibilities	Manager of an 8-persons research team (researchers, engineers, Ph.D. students).. Since 2008, member of the "Institut de Recherche en Informatique de Toulouse" (IRIT) -- Parallel Algorithms and Optimisation group (APO) Research on topics related to Air Traffic Management, applying optimization techniques and machine learning techniques to problems such as ground-based aircraft trajectory prediction. Genese/Decomplex industrial project (Expertise) SESAR WP 4.7.1, 10.8.1, 7.5.4 (Expertise)

Name and address of employer	DSNA/DTI/R&D 7 avenue Edouard Belin BP 54005, 31055 Toulouse Cedex 4, France
Type of business or sector	Research and development in the air traffic management field.
Dates	2004-2010
Occupation or position held	Researcher at the R&D department of DSNA/DTI Planning, Optimization, and Modeling Unit <i>Note: DSNA ("Direction des Services de la Navigation Aérienne") is the French air navigation services provider.</i>
Main activities and responsibilities	Also member since 2008 of the "Institut de Recherche en Informatique de Toulouse" (IRIT) -- Parallel Algorithms and Optimisation group (APO) Research on topics related to Air Traffic Management, applying optimization techniques and machine learning techniques (neural networks) to problems such as: <ul style="list-style-type: none"> • correlation between air traffic complexity and controllers' workload • dynamic airspace configuration • aircraft trajectory prediction Genese/Decomplex industrial project (Expertise) SESAR WP 4.7.1, 10.8.1, 7.5.4 (Expertise) Assistance to the head of Unit in managing a 10-persons research team, with Ph.D. and Masters students.
Name and address of employer	DSNA/DTI/R&D 7 avenue Edouard Belin BP 54005, 31055 Toulouse Cedex 4, France
Type of business or sector	Research and development in the air traffic management field.
Dates	2000-2004
Occupation or position held	Successively Ph.D. Student, and researcher at the Global Optimization Laboratory (LOG)
Main activities and responsibilities	Research on topics related to Air Traffic Management, applying evolutionary algorithms to the 3D or 4D separation of air traffic flows. Research on an air traffic controllers' workload model using neural networks and relevant air traffic complexity metrics.
Name and address of employer	Centre d'Etudes de la Navigation Aérienne Laboratoire d'Optimisation Globale (LOG) 7 avenue Edouard Belin BP 54005, 31055 Toulouse Cedex 4, France
Type of business or sector	Research in air traffic management.
Dates	1996 - 1999
Occupation or position held	Deputy chief of the division " <i>Computer-assisted control tools</i> " at the French Civil Aviation Technical Service (STNA)
Main activities and responsibilities	Mainly in charge of the tools developed by the French partners (STNA, SOFREAVIA et Airsys) within the European project CINCAT, and also of the Radar Processing System used in the five French en-route air traffic control centres and Paris airports.
Name and address of employer	Service Technique de la Navigation Aérienne (now DSNA/DTI) 1 avenue du Dr Maurice Grynfolgel BP53584, 31035 Toulouse, France
Type of business or sector	Technical service of the French air navigation services provider
Dates	1991-1994
Occupation or position held	Engineer in the "subdivision Etudes" (<i>ATC design</i>) and "subdivision Contrôle" (<i>ATC operations</i>)
Main activities and responsibilities	Intermediate management of air traffic control operations.
Name and address of employer	Brest Air Traffic Control Center (CRNA/Ouest) Gorre Menez, 29470 Loperhet, France
Type of business or sector	Air traffic control operations

Dates	1990
Occupation or position held	Military service, as a volunteer for technical assistance
Main activities and responsibilities	Technical support
Name and address of employer	Cayenne-Rochambeau airport, French Guyana
Type of business or sector	Air traffic control operations
Education and training	
Title of qualification awarded	Habilitation à diriger des recherches (post-doctoral degree similar to tenure)
Principal subjects/occupational skills covered	Optimisation and Machine Learning methods applied to air traffic problems Thesis title: "Méthodes d'optimisation et d'apprentissage appliquées à des problèmes de trafic aérien"
Name and type of organisation providing education and training	Institut National Polytechnique de Toulouse (University) 6 allée Emile Monso, BP 34038, 31029 Toulouse Cedex 4, France
Level in national or international classification	ISCED 2011 level 9
Dates	2000-2004
Title of qualification awarded	Ph. D. in computer science
Principal subjects/occupational skills covered	Hybrid evolutionary algorithms applied to air traffic management problems. Thesis title: "Optimisation des flux de trafic aérien"
Name and type of organisation providing education and training	Institut National Polytechnique de Toulouse (University) 6 allée Emile Monso, BP 34038, 31029 Toulouse Cedex 4, France
Level in national or international classification	ISCED 2011 level 8
Dates	1996
Title of qualification awarded	Master in computer science
Principal subjects/occupational skills covered	Evolutionary algorithms applied to air traffic management problems. Thesis title: "Pré-filtre tactique pour la résolution de conflits en route"
Name and type of organisation providing education and training	Institut National Polytechnique de Toulouse (University) 6 allée Emile Monso, BP 34038, 31029 Toulouse Cedex 4, France
Level in national or international classification	ISCED 2011 level 7
Dates	September 1994 to August 1996
Title of qualification awarded	"Ingénieur de l'Aviation Civile" (Civil aviation engineer)
Principal subjects/occupational skills covered	Engineer degree specific to the upper management staff of the French civil aviation authority, now merged with the "Ingénieur des ponts, des eaux, et forêts"
Name and type of organisation providing education and training	Ecole Nationale de l'Aviation Civile (ENAC) 7 avenue Edouard Belin, 31000 Toulouse, France
Dates	September 1986 to August 1989
Title of qualification awarded	Ingénieur des Etudes et de l'Exploitation de l'Aviation Civile
Principal subjects/occupational skills covered	Engineer degree for the intermediate/upper management staff of the French civil aviation authority
Name and type of organisation providing education and training	Ecole Nationale de l'Aviation Civile (ENAC) 7 avenue Edouard Belin, 31000 Toulouse, France

Personal skills and competences

Mother tongue(s)

Other language(s)

Self-assessment

European level (*)

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Communication skills in a multi-cultural environment gained through my participation in international conferences and European projects, and a 5 months internship at MITRE Corp. in Atlantic City (1989).

Organisational skills and competences

Coordination of technical and scientific activities:

- DSNA/DTI/R&D activities in SESAR WP 4.7.1, 10.8.1, and 7.5.4
- Research collaboration between Airbus and DSNA/DTI/R&D

Leadership abilities, developed as head of the Planification, Optimization and Modeling Unit, as well as in other previous positions.

Technical skills and competences

Good knowledge of optimization techniques and neural networks, applied to Air Traffic Management problems.

See my publications followink this [link](#).

I have reviewed articles submitted to:

- AI Communications
- RAIRO - Operations Reseach
- Transportation Research Part C
- Journal of Global Optimization

Practical experience in implementing optimization methods and neural networks as Ocaml libraries.

Practical experience in air traffic control operations. Working experience of en-route air traffic control: I followed the "ab-initio controller" training, with a full summer in the control room.

Computer skills and competences

Good command of Linux, C, Ocaml, LaTeX, OpenOffice

Artistic skills and competences

Piano player

Driving licence

car, motorcycle