

Thibault Gateau

Date of birth: December 21, 1986
Driver's licence

3 rue du Congo,
Appartement 17
31 500 Toulouse FRANCE
Phone: +33 6 72 90 00 18
Email: thibault.gateau@gmail.com

PHD IN ARTIFICIAL INTELLIGENCE, SPECIALIZED IN AUTONOMOUS DECISION-MAKING

Professional Experience

- Since 2013** [ISAE - SUPAÉRO](#) (SUPERIOR INSTITUTE OF AERONAUTICS AND SPACE), Toulouse, France.
Postdoctoral position in the Human Factors and Neuroergonomics Team.
Subject : Interaction between the human operator and a team of autonomous vehicles.
Keywords : Neuroergonomics, Adaptive Interaction, Multi-Agent Systems, Autonomous Vehicles, Human Machine Interface, Brain Computer Interface, fNIRS, Eye-tracking, ECG.
- 2009-2012** [ONERA/DCSD](#), Toulouse, France.
PhD in Artificial Intelligence.
Subject : Mission supervision for a team of autonomous and heterogeneous vehicles, in a dynamic environment, under uncertain communications.
Keywords : Planning, Re-planning, Plan Repair, Embedded Architectures, Multi-Agent Systems, Autonomous Decision-Making, team cooperation.
Directors : Magali Barbier and Charles Lesire.
Role : Conception of the cooperation manager in the [Action Project](#).
- 2009-2012** [ISAE-SUPAÉRO](#), Toulouse, France.
Assistant Teacher in Object-Oriented Programming, 40h/year.
- 2009**
(6 months) [ONERA/DCSD](#), Toulouse, France.
Research internship in a laboratory.
Subject : Mission supervision for a set of autonomous vehicles.
- 2008**
(3 months) [SEETHROO](#), Los Angeles, United-States.
Internship in an Internet start-up, oriented on ads targeting.
Keywords : Ruby on Rails, code refactoring, code obfuscation, unit tests, functional tests.
- 2007**
(2 months) [CRYA DE LA UNAM](#), Morelia, Mexique.
CRYA (Center of Radioastronomy and Astrophysics) of the UNAM (Universidad Nacional Autónoma de México).
Technical assistant : software testing for application in astrophysics and manuals writing.

Education

- 2009 – 2012** [ONERA/DCSD](#), Toulouse, France.
PhD in Artificial Intelligence.
- 2008 – 2009** [NATIONAL POLYTECHNIC INSTITUTE OF TOULOUSE](#), Toulouse, France.
Master's degree in Artificial Intelligence.

- 2006 – 2009 **ENSEEIH**T, Toulouse, France.
Engineer's degree in Computer Science and Applied Mathematics.
(Superior National Engineering School in Electrotechnics, Electronics, Computer Science, Hydraulics and Telecommunications).
- 2004 – 2006 **CPGE** in Lycée Clémenceau, Nantes, France.
Preparatory classes for admission exams into national engineering schools.
- 2003 – 2004 Lycée Français Blaise Pascal, Libreville, Gabon.
Bachelor's degree (Sciences), with honors.

Personal Involvement

- Qualified for applying to a lecturer position in France (March 2013).
- PhD students' delegate in the formation council and in the research council at ISAE (2012).
- First aid attendant (since 2011).
- Organization member of the thesis day of PhD students at Onera (2011).
- PhD students' delegate at Edsys (Systems' Doctoral School) (2009-2012) and organization member of the doctoral congress of Edsys (Logistics responsibilities) (2010).
- Organization member of the ENSEEIH
T conferences for 2nd year students (2007–2008).
- Treasurer of the "BDThèque" at ENSEEIH
T(2007–2008).
- Volunteer in "AFFEV" association which promotes equality of chances in education (2006).

Languages

- **French** : Native language.
- **Spanish** : Bilingual (7 years in Mexico).
- **English** : Fluent (TOEIC : 920).
- **German** : Beginner (2 years of courses).
- **Russian** : Beginner (2 years of courses).

Computer Skills

- OS : GNU/Linux (Ubuntu), Unix, Solaris, Windows 9x, XP, Vista, 7.
- Programming : Languages : OOP (Java, C++, Ruby, Python); Imperative (C, Fortran, script Shell); Functional (Caml, Pascal); Databases (MySQL); logical (Prolog).
Frameworks : Ruby on Rails, Delphi, Eclipse (Europa), QtCreator (and Qt libraries), NetBeans.
Web Technologies : HTML, PHP, J2EE, web-services.
Modeling : UML, Merise.
Networking (TCP/IP) and middlewares (Corba, RMI, Yarp).
- Others : Matlab, Maple, L^AT_EX, classical Office suites (Microsoft Office : Word, Excel, PowerPoint and Open Office).
- Specifics : Orocos (Robotics framework component based), ROS (Robot Operating System), bases on IDL (Interactive Data Language) and Vapor (software used for large data analysis and visualization).

Personal activities

- Reading (scientific reviews, techno-thriller, fantasy, sci-fi), piano, climbing, aeromodeling, gliding, para-gliding (pilote licence), jugglery, diving (N2 licence, N1 biology licence), ju-jitsu.
- Good geographical flexibility (7 years in Mexico, 6 years in Madagascar, 3 years in Gabon).

Referee

- Frédéric DEHAIS** Professor-Researcher.
ISAE - DCAS - Human Factors and Neuroergonomics Lab.
France 31400 Toulouse, France.
frederic.dehais@isae.fr.
- Charles LESIRE** ONERA - The French Aerospace Lab Aerospace Lab.
France 31055 Toulouse, France.
Charles.Lesire@onera.fr.
- Magali BARBIER** ONERA - The French Aerospace Lab Aerospace Lab.
France 31055 Toulouse, France.
Magali.Barbier@onera.fr.

Publications

- IROS 2016** IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS.
Considering Human's Non-Deterministic Behavior and his Availability State When Designing a Collaborative Human-Robots System.
Thibault Gateau, Caroline P. Carvalho Chanel, Mai-Huy Le, Frederic Dehais.
- Autonomous Robots 2016** SPRINGER'S JOURNAL.
A distributed architecture for supervision of autonomous multi-robot missions.
Charles Lesire, Guillaume Infantes, Thibault Gateau, Magali Barbier.
- Plos One 2015** OPEN ACCESS PEER-REVIEWED SCIENTIFIC JOURNAL PUBLISHED BY THE PUBLIC LIBRARY OF SCIENCE.
Real-Time State Estimation in a Flight Simulator Using fNIRS.
Thibault Gateau, Gautier Durantin, Sebastien Scannella, Frederic Dehais.
- CHI 2015** ACM - SIGCHI CONFERENCE ON HUMAN FACTORS IN COMPUTING SYSTEMS, Seoul, Korea.
"Automation Surprise" in Aviation : Real-Time Solutions.
Frederic Dehais, Vsevolod Peysakhovich, Sebastien Scannella, Jennifer Fongue, Thibault Gateau.
- AAAI 2015 - AI and Ethics** AAAI CONFERENCE ON ARTIFICIAL INTELLIGENCE - WORKSHOP : AI AND ETHICS, Austin, USA.
Human-Robot Systems Facing Ethical Conflicts : a Preliminary Experimental Protocol.
Julien Collart, Thibault Gateau, Ève Fabre, Catherine Tessier.
- EMBS 2014** IEEE - ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY, EMBS., Chicago, USA.
Moving average convergence divergence filter preprocessing for real-time event-related peak activity onset detection : Application to fNIRS signals..
Gautier Durantin, Sebastien Scannella, Thibault Gateau, Arnaud Delorme, Frederic Dehais.
- IROS 2013** IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS, Tokyo, Japon.
HiDDeN : Cooperative Plan Execution and Repair for Heterogeneous Robots in Dynamic Environments.
Thibault Gateau, Charles Lesire, Magali Barbier.

- DARS 2012 (Poster)** INTERNATIONAL SYMPOSIUM ON DISTRIBUTED AUTONOMOUS ROBOTIC SYSTEMS (DARS), POSTER SESSION, Baltimore, MD, USA.
Poster : Robust strategies for multi-robot team collaboration under uncertain communications.
Thibault Gateau, Charles Lesire, Magali Barbier.
- ICAPS 2012 - PlanEx** INTERNATIONAL CONFERENCE ON AUTOMATED PLANNING AND SCHEDULING - WORKSHOP : PLANNING AND PLAN EXECUTION FOR REAL-WORLD SYSTEMS : PRINCIPLES AND PRACTICES, Atibaia, Brésil.
Knowledge Base for Planning, Execution and Plan Repair.
Thibault Gateau, Gaëtan Severac, Charles Lesire, Magali Barbier, Eric Bensana.
- RFIA 2012** RECONNAISSANCE DES FORMES ET L'INTELLIGENCE ARTIFICIELLE, Lyon, France.
HiDDeN, une architecture décisionnelle distribuée pour la coopération de véhicules individuellement autonomes.
Thibault Gateau, Magali Barbier et Charles Lesire-Cabaniols.
- ICAPS 2010-DC** INTERNATIONAL CONFERENCE ON AUTOMATED PLANNING AND SCHEDULING - DOCTORIAL CONSORTIUM, Toronto, Canada.
Local Plan Execution and Repair in a Hierarchical Structure of Sub-Teams of Heterogeneous Autonomous Vehicles.
Thibault Gateau, Magali Barbier et Charles Lesire-Cabaniols.