Francesco Accatino
Environmental Engineer,
Modeller of social-ecological systems

PROFESSIONAL EXPERIENCE

Dec 2015 - today	**Researcher CR2** INRA (Institute National de la Recherche Agronomique) Main project: Model of ecosystem service provision at the French scale. Detecting trade-offs and synergies between different ecosystem services, food production, and biodiversity preservation. Projects: TRUSTEE, EFESE.
Sept 2014 – Nov 2015	**Postdoctoral fellow** University of Western Ontario, London, Canada Research Activity: I developed a social-ecological model for simulating landscape dynamics under different wetland policy scenarios. Programming and analysis tools: Netlogo, Matlab, GISs. Project: CNAES Canadian Network for Aquatic Ecosystem Services
Sept 2010 – Feb 2015	**Teaching assistant** (winter semesters) – Politecnico di Milano, Milan, Italy. Responsible of the laboratory of the courses of Hydrology for Environmental and Civil Engineering students. I teach Matlab programming for implementing the fundamental hydrological methods and Monte Carlo techniques. I give lessons, I prepare teaching metherial, I give oral examinations. Courses vary in number, from 20 to 200 students.
Apr 2014 – Aug 2014	**Research associate** at department of Ecosystem Modelling, University of Göttingen, Göttingen, Germany. I programmed a model for biological control of tomato pests. Tool: C++ (Qt platform)

EDUCATION

Jan 2010 – Mar 2014	**PhD Candidate** at Politecnico di Milano Dissertation title: “Dynamics of tropical and subtropical vegetation: from an equilibrium to a non-equilibrium modelling approach”. Main projects: • *Savanna-forest vegetation dynamics modelling*:I modeled woody cover dynamics in tropical and subtropical vegetation systems describing vegetation-

fire feedbacks I explored these dynamics both with spatially implicit and spatially explicit individual-based approaches.
- *Rangeland ecology*: I developed a stochastic model of rangeland dynamics and I applied the viability theory to find the states guaranteeing a long-term sustainable use of rangelands.

Minor projects
- I developed a model of mosquito population dynamics in a water pond network
- I developed a model of vegetation-permafrost feedbacks in tundra ecosystems

I supervised on average 8 students per year for bachelor/master thesis.

Apr – Jul 2013	**Visiting PhD Student** – School of Life Science - University of Kwa-Zulu Natal, Pietermaritzburg, South Africa
Dec 2012	**Visiting PhD Student** – UMR SADAPT, INRA, Paris, France
Apr – Sept 2012	**Visiting PhD Student** – Department of Ecosystem Modelling – University of Göttinen, Göttingen, Germany.
Sept 2007 - May 2010	**Master Student** – Environmental Engineering – Politecnico di Milano, Milan, Italy. Thesis title: "A minimal eco-hydrological model for savanna vegetation: the role of rainfall, fire and herbivores"
Sept 2004 – Sept 2007	**Bachelor Student** – Environmental Engineering – Politecnico di Milano, Milan, Italy. Thesis title: "Lario lake basin planning: indices of hydro-morphologic quality and fish welfare"

ADDITIONAL INFORMATION

Languages	Italian: Native language English: Effective operational proficiency French: Intermediate German: Elementary
Computer Skills	Strong command of Matlab, NetLogo, Qt, NetLogo-GIS interfacing. R, GISs (ArcGIS, SagaGIS, Quantum GIS). Good knowledge of Microsoft Office (Word, PowerPoint, Excell, Access)
Referee Activity	Ecological Modelling; Animal; Ecosphere; African Journal of Range and Forage Science; Hydrology and Earth System Science; African Journal of Ecology, Perspectives in Plant Ecology, Evolution and Systematics.