

**JONATHAN HESS**

12, rue de la Concorde

92600 ASNIERES, France

Tel : +33 (0)1 47 33 24 88

E-mail : [jonathan.hess@ensta.org](mailto:jonathan.hess@ensta.org)

French Nationality

3<sup>rd</sup> February 1982

Single

Have done my military service

**OBJECTIVE:** Position as a PhD/Master's Degree student in the field of bioremediation processes modelling and monitoring.

**SUMMARY**

- ✓ **Msc in Biological Oceanology and Marine Environment** : specialization in **numerical simulation, modelling, and data analysis**
- ✓ **Msc in Engineering**: solid background in Mathematics (systems control, optimization), Physics

**EDUCATION**

- 2003-2004: Msc (DEA), University of Paris VI, France  
Leading University in Paris ([www.umpc.fr](http://www.umpc.fr))  
Major: Biological Oceanology and Marine Environment  
Specialization: **Numerical simulation, modelling and data analysis**
- 2001-2002: MSc in Engineering (Diplôme d'ingénieur), **Ecole Nationale Supérieure de Techniques Avancées**, Paris, France  
Leading General Engineering School at Paris ([www.ensta.fr](http://www.ensta.fr))  
Major: **Environmental Sciences**.  
Specialization: **Oceanography**  
Relevant courses: biology, numerical simulation and modelling for environmental sciences, systems control, optimization, applied mathematics, biochemistry  
Programming (C, Java, FORTRAN)
- 2001: BSc in Engineering, ENSTA
- 1999-2001: Classes Préparatoires, Lycée Chaptal, Paris, France.  
Two years intensive training in special scientific classes to prepare the high competitive nation wide exams to engineering schools. Ranked 224<sup>th</sup> out of 3000.
- 1999: Baccalauréat (specialization in mathematics). Graduated with honors.  
Grade 3/5 at the APIEL diploma.
- 1992-1996: Studies at the International School of Paris, English Section

**Professional experience**

February-July 2004: Intern, LOV (Oceanography Laboratory of Villefranche)-**INRIA** (The French National Institute for Research in Computer Science and Control)-University of Essex, **Biological Sciences Department**, three months in Villefranche-sur-mer, France, and two months at the University of Essex, England

- Compared two chemostat models of phytoplankton growth representing the simultaneous limitation by light and nutrients: had to set a general mathematical formulation of the models to test their stiffness and to see if their properties were intrinsic or not- compared them with several sets of data done in chemostat.

May-July 2003: **Intern, LODYC** (Oceanography and Climate laboratory), Paris, France

- Worked on a model of the biological growing activity at a front: added to a former coupled model, average forcings such as wind stress, sst, salinity-calculated the monthly averages of wind stress, sst, salinity -compared the former and the new model.

July 2002: **Intern, FORUM** (design furniture seller for industry and firms), Paris, France

- Worked as a storekeeper
- Managed the warehouse

2001-2002: **Tutor**

- Taught Maths, Physics and Chemistry
- Learned pedagogical tools to communicate better

## **LANGUAGE**

French: Native language

English: Fluent (TOEFL 267/330)

German: Proficient

Chinese: Basics

## **COMPUTER SKILLS**

Systems: UNIX(Linux), Windows

Languages: C, HTML, Java, FORTRAN

Software: MS Office, Star Office, Latex, IDL

Computation: Matlab, Scilab, Maple

## **Other**

**Sport.** Practice of scuba diving for 6 years (level CMAS \*\*, preparing level \*\*\*), tennis

## **Fellowship experience**

- One year as treasurer of the sport association
  - administered a budget of 50,000 euro
  - organized week-ends and trips for more than hundred students
  - organized international sport events for more than a thousand students
- Two years in the student union
  - organized monthly events for more a thousand of students