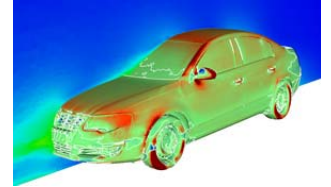




PhD POSITION OPENING



PhD Thesis Title: Continuous & discrete adjoint for the in-house solver, GPU-enabled and one-shot adjoints, for unsteady flow optimization

at the **National Technical University of Athens** (NTUA)

The “AboutFlow” Initial Training Network (ITN)

This PhD position will be funded by the AboutFlow Initial Training Network (ITN) of the **European Commission** (Marie-Curie People scheme; Nov. 2012 – Oct. 2016). The aim of AboutFlow is to develop robust gradient-based **optimisation techniques** using **adjoint methods** for the numerical optimisation of (steady and, mainly, unsteady) flows.

NTUA: Hosting Organization

NTUA is a leading university in both theoretical and experimental research. This position opening is for the **Parallel CFD & Optimisation Unit** (PCOpt/NTUA) of the **School of Mechanical Engineering** of NTUA, headed by **Prof. K.C. Giannakoglou**. The PCOpt/NTUA team has a great experience in developing adjoint methods (see: <http://147.102.55.162/research/>).

Required Background

Essential: (a) MSc (or equivalent) in Mechanical/Aerospace Engineering, or Applied Mathematics, Physics or Computer Science if they have an acceptable background in modelling of fluid flow, (b) experience with CFD code **development in object-oriented programming languages**, (c) willingness and ability to attend the regular network training events in the EU and to spend up to 3 month secondments at network partners (d) very good knowledge of English (writing/speaking)

Desired: Experience with numerical optimisation, adjoint methods, turbulence models, CUDA, etc.

Salary, conditions and environment

The remuneration is 36.000 Euro per annum (living allowance), of which taxes, social contributions and pension payments have to be paid. Over and above, mobility allowance of about 9500 Euro per annum (at minimum; the exact amount depends on marital status) is foreseen.

See: <http://aboutflow.sems.qmul.ac.uk/>

How to inquire and apply

Applications for the position are open. For informal enquiries about this position please contact:

Professor Kyriakos C. Giannakoglou

E-mail: kgianna@central.ntua.gr

Estimated date for starting the PhD: May 1, 2013.

(Ref: AboutFlow ESR9)