Tomáš Kopáček

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EDUCATION

2007-Present Czech Technical University in Prague

Prague, Czech Republic

Faculty of Mechanical Engineering, Department of Technical Mathematics

Ph.D candidate

Thesis Topic: Numerical modeling of 3D viscous flow

Supervisor: doc.Ing. Jiří Fürst Ph.D.

• Developing of CFD solver for 3D, turbulent, stratified, time dependent flow.

2007-2008 von Karman Institute for Fluid Dynamic

Brussels, Belgium

Aeronautics&Aerospace Department

Diploma Course (*Very intensive educational and research program in CFD*) **Project Topic:** Residual Distribution Method (RDS) for linearized Euler equations

Supervisor: prof. Herman Deconinck

- Worked within an international team.
- Implemented Linearized Euler equations (LEE) in to COOLFuiD (in-house C++ CFD package).
- Applied LEE to acoustics.
- Chose a suitable test cases.
- Elaborated complex report.
- Presented achieved results. (Our team was the first in the world applying RDS to such a problem)

2006 von Karman Institute for Fluid Dynamic

Brussels, Belgium

Aeronautics&Aerospace Department

Short training programme **Topic:** Bubble Laden Flow

Supervisor: prof. Herman Deconinck

• Tested in-house library for bubble tracking - PLaS.

2001-2007 Czech Technical University in Prague

Prague, Czech Republic

Faculty of Mechanical Engineering, Department of Applied Mathematics

Master of Arts in Mathematical modeling in engineering

Thesis Topic: Numerical modeling of viscous incompressible flow

Supervisor: Ing. Luděk Beneš Ph.D.

- Developed CFD solver for 2D, turbulent, incompressible, steady flow.
- Chose suitable test cases.
- Validation and verification.

2002-2003 Charles University

Prague, Czech Republic

School of Mathematics and Physics

EXPERIENCE

2006-2007

Aircraft Research and Testing Institute Corp.

Prague, Czech Republic

Department of low speed aerodynamic

Research assistant

- Tested and determined suitability of various CFD codes for using in the department.
- Participate on developing 3D compressible solver for external aerodynamics.

Summer 2005 Hica Ltd. Dublin, Ireland

Construction company

Worker

Holliday Inn Summer 2004 Cleveland, Ohio, USA

Hotel

Maintenance, potter, housekeeping

1997-2003 Metrostav Corp. Prague, Czech Republic

Construction company

Technician in developing workshop

- Participated on developing concrete pump.
- We obtained utility design.

1994-1997 **SSS** (family business)

Wedding company

- Communication with costumers.
- Prepared advertisement.
- Managed expanding to other localities.

TEACHING EXPERIENCE

Taught the courses "Algorithm development and programming" and "Numerical mathematic".

AWARDS

5 years merit scholarship (CTU).

Graduated with honour. Dean's award of final thesis.

CONFERENCES

5th workshop of ARTI as., Science, research and developing in Czech aircraft industry, 2007 Nix3D I numerical solver for external, inviscid, compressible flow.

Topical problems of fluid mechanic 2007

Numerical Simulation of 2D Turbulent Flow in a Build-Up Area

Colloquium FLUID DYNAMICS 2007

Numerical and Experimental Study of the Flow Over a Simple Building

SKILS

- Windows 95-Vista, Linux.
- Microsoft Word, Excel, Outlook, Power Point, LaTeX, Beamer and others.
- Matlab, MathCad, Tecplot, Gnuplot, Fluent, Gambit, ICEM.
- C,C++, SVN.
- Proficient in English, intermediate in Russian (now passive).
- Driving license A,B.
- Certificate for Operators of Small Craft
- Trained in making presentations and writing research reports.
- Good communication skills.
- Strong analytical, technical and organizational skills.
- Ability to work under high pressure, meet the deadlines.
- Willingness to assume responsibility.
- Willingness to learn new things.
- Willingness to work abroad.
- I like challenges.

PERSONAL

Enjoy traveling, skiing, tennis, yachting, fitness, reading books, fantasy, science fiction.

Prague, Czech Republic