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

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**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

Summer 2004 **Holliday Inn** **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)***Prague, Czech Republic**

*Wedding company*

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

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**TEACHING**

**EXPERIENCE** Taught the courses “Algorithm development and programming” and “Numerical mathematic”.

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**AWARDS**

5 years merit scholarship (CTU).

Graduated with honour.

Dean’s award of final thesis.

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**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*

Numericaland Experimental Study of the Flow Over a Simple Building

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**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.

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**PERSONAL**

Enjoytraveling, skiing, tennis, yachting, fitness, reading books, fantasy, science fiction.