

PERSONAL INFORMATION **ANTAL Tiberiu Alexandru**

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💬 Id yahoo: antal\_tiberiualexandru

Sex masculin | Date of birth 28/07/1967 | Nationality română

JOB APPLIED FOR POSITION **Professor, position 12, in the job title list of the Department of Mechanical Systems Engineering, Technical University of Cluj-Napoca, Romania.**

## WORK EXPERIENCE

**01.II.2006 - 01.X.2006** **Personal Assistant of the Minister of Education and Research**  
Ministry of Education (Mihail Hărdău).

Ministerul Educației Naționale, Str. Gen. Berthelot 28-30 ,Sector 1, 010168, București.

<http://www.edu.ro/index.php/base/frontpage>

- Adviser of the Minister in the field of information technology and computers (ITC);
- Checking the contracts and the procurement related to the ITC filed;
- Securing information related to national exams.

Sector Education.

**01.X.2001 - Associate professor**  
Technical University from Cluj-Napoca. Faculty of Machine Building. Department of Mechanical System Engineering.

Str. Memorandumului nr. 28, Cluj-Napoca, cod postal 400114.

<http://www.utcluj.ro/>

- Lectures and laboratory works in the following disciplines:
  - bachelor degree (in Romanian and English) computer programming, technical informatics;
  - master degree (in Romanian): databases, elements of artificial intelligence, web design and object-oriented programming languages.
- Advisor of dissertation papers for the bachelor and master degrees.
- Participation in committees of examination, PhD papers and promotions.
- Research activities in contracts.

Sector Education.

**25.II.1998 - 31.IX.2001** **Lecturer**  
Technical University from Cluj-Napoca. Faculty of Machine Building. Department of Mechanical System Engineering.

Str. Memorandumului nr. 28, Cluj-Napoca, cod postal 400114.

<http://www.utcluj.ro/>

- Lectures and laboratory works in the following disciplines:
  - bachelor degree (in Romanian) computer programming, technical informatics, databases, web design.
- Advisor of dissertation papers for the bachelor and master degrees.
- Research activities in contracts.

Sector Education.

**28.II.1994 - 24.II.1998**    **Assistant**  
Technical University from Cluj-Napoca. Faculty of Machine Building. Department of Mechanical System Engineering.  
Str. Memorandumului nr. 28, Cluj-Napoca, cod postal 400114.  
<http://www.utcluj.ro/>  
▪ Laboratory works in the following disciplines:  
- bachelor degree (in Romanian) computer programming, technical informatics.  
Sector Education.

**16.XI-1991 - 27.II.1994**    **Junior assistant**  
Technical University from Cluj-Napoca. Faculty of Machine Building. Department of Mechanical System Engineering.  
Str. Memorandumului nr. 28, Cluj-Napoca, cod postal 400114.  
<http://www.utcluj.ro/>  
▪ Laboratory works in the following disciplines:  
- bachelor degree (in Romanian) computer programming, technical informatics.  
Sector Education.

**1990 -15.XI.1991**    **Engineer**  
Computer division from Electrosigma S.A. (formerly I.E.I.A.)  
Servicing computer hardware and medical equipment.  
Sector Industry.

## WORK EXPERIENCE

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- 2012-2013**    **Specialization in Information and Communication Technology**  
Project "Effective implementation of modern educational instruments and blended-learning technologies in higher education teaching-learning for engineers", abbreviated DidaTec, POSDRU/87/1.3/S/60891  
▪ Teaching university courses using ICT.
- mai 2012**    **English Skills Certification**  
Level 5 ESOL, International JETSET, London Chamber of Commerce and Industry.
- sept. 1999**    **Research Internship in genetic algorithms**  
Computer and Automation Research Institute, Hungarian Academy of Science, Budapest, Hungary.
- mai 1997**    **Research Internship in holography and holographic imaging**  
TEMPUS, Wuppertal University, Germany.
- iunie 1994**    **Research Internship in CAD / CAM**

Eidgenossische Technische Hochschule Zurich, Switzerland

- feb. 1994**    **Specialization Course**  
 Centrul de Pregătire în Informatică - S.A., București  
 • the AutoCAD instructor training course - Level 2 in specialty "Computer Aided Design"
- oct. 1993**    **Specialization Course**  
 Centrul de Pregătire în Informatică - S.A., București  
 • the AutoCAD instructor training course - Level 1 in specialty "Computer Aided Design"
- 10.VII.1998:**    **Ph.D. diploma**  
 Diploma of Series A No. 9, issued by the Ministry of Education in Romania, Technical University of Cluj-Napoca  
 • Ph.D. with specialization in mechanisms
- 1985-1990**    **Engineer diploma (M.Sc. + B.Sc. )**  
 Polytechnic Institute of Cluj-Napoca, Faculty of Electrical Engineering, Department of Electronics and Telecommunications.  
 • Diploma of Engineering in Electrical profile, specializing in electronics and telecommunications with depth direction in applied electrons.
- 1981–1985**    **High School Diploma**  
 Industrial School "George Barițiu" from Cluj-Napoca.  
 • Diploma obtained in 1985 in electrical profile.

**PERSONAL SKILLS**

Mother tongue(s)    Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Hungarian	C2	C2	C2	C2	C2
English	C2	C2	C2	C2	C2
Level 5 ESOL International JETSET London Chamber of Commerce and Industry					

Communication skills    • 4<sup>th</sup> year of study at the University, a course in pedagogy.

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|------------------------------------|---|
| Organisational / managerial skills | <ul style="list-style-type: none"> <li>• Advisor, during 1996 - 2002 on issues of computers and database of the Centre for Scientific Research and Technology Transfer and Implementation of Inventions from the Technical University Cluj-Napoca.</li> <li>• Director of research contracts won by competition with companies and foreign nationals.</li> <li>• Advisor of the Minister of Education on ITC.</li> </ul>  |
| Computer skills                    | <ul style="list-style-type: none"> <li>• Programming: : ASM (6510, 8080, 8088/8086), Fortran, C, Visual Basic, Visual C++, Java, Turbo Pascal, Turbo Prolog, AutoLISP, SQL, PL/SQL;</li> <li>• RDBMS: Microsoft Access 2, 97, 2000, 2002, Oracle 9i (8.1.6, 8.1.7), 9i (9.0.1, 9.0.2), 10g;</li> <li>• CAD: AutoCAD 12, 14 (Instructor autorizat AUTODESK ), CATIA V5R11, SolidWorks, SolidEdge;</li> <li>• Web: VBScript, JScript, ASP, IIS, PSP, Oracle Apache, HTML, Trellix, CoffeCup, SiteSpinner;</li> <li>• Other: Word, Excel, PowerPoint, WordPerfect, Corel Presentation, Ulead PhotoImpact, ACDSee.</li> </ul> |

#### ADDITIONAL INFORMATION

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|--------------------|---|
| Publications       | <ul style="list-style-type: none"> <li>• Specialty books: 5 (three single author, 2 co-author)</li> <li>• Didactic text books: 4 (2 single author, 2 co-author)</li> <li>• Laboratory guide: 4 (2 single author, 2 co-author)</li> <li>• Scientific papers: 73 (10 ISI and ISI Pro, 8 BDI, 42 single author or first author)</li> </ul> |
| Research           | <ul style="list-style-type: none"> <li>• Research Contracts: 18 (3 director)</li> </ul>   |
| Conferences        | <ul style="list-style-type: none"> <li>• Participated in over 30 national and international conferences</li> </ul>  |
| Honours and awards | <ul style="list-style-type: none"> <li>• External Member of the Corporation doctoral Hungarian Academy of Sciences.</li> <li>• Guest Professor of HAMK University of Applied Sciences, Finland.</li> </ul>  |

#### ANNEXES

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|---------------------|--|
| Specialty books     | <ol style="list-style-type: none"> <li>1. TIUCĂ, T., PRECUP, T., <b>ANTAL, T.</b>, Dezvoltarea aplicațiilor cu AutoCAD și AutoLISP, Editura Promedia Plus Computers, 1995, p. 303, ISBN 973-96862-2-2.</li> <li>2. <b>ANTAL Tiberiu Alexandru</b>, Limbajul C ANSI, Editura RISOPRINT, 2001, p. 253, ISBN 973-656-065-1.</li> <li>3. <b>ANTAL Tiberiu Alexandru</b>, Visual BASIC pentru ingineri, Editura RISOPRINT, 2003, p.244, ISBN 973-656-514-9.</li> <li>4. <b>ANTAL Tiberiu Alexandru</b>, Proiectarea paginilor Web cu HTML, VBScript și ASP - ediția a II-a, Editura RISOPRINT, 2006, p.264, ISBN 973-751-349-5.</li> <li>5. Adalbert <b>ANTAL</b>, Gheorghe <b>KEREKES</b>, <b>Tiberiu ANTAL</b>, Ovidiu <b>TATARU</b>, Horia <b>GORGOI</b>, Zahnradgetriebe – Transmisii cu roți dințate, 2004, p. 221, UTPRES, ISBN 973-662-142-1.</li> </ol> |
| Didactic text books | <ol style="list-style-type: none"> <li>1. <b>MARCU, V., ORLANDEA, C., ANTAL, T.</b>, Wordperfect pentru documente tehnice, Editura DACIA, 1994, p. 166, ISBN 973-350520-X.</li> <li>2. <b>MARCU, V., ANTAL, T., MORAR, S., PLITEA, D., LUPEA, L., BERTEAN, M.</b>, Informatică tehnică, volumul I, At. de multiplicare al Univ. Tehnice Cluj-Napoca, 1995, p.321.</li> <li>3. <b>ANTAL Tiberiu Alexandru</b>, Microsoft Access 97 și 2000 în 14 cursuri, Editura Toderco, 2000, p. 299, ISBN 973-99779-6-0.</li> <li>4. <b>ANTAL Tiberiu Alexandru</b>, Proiectarea paginilor Web cu HTML, VBScript și ASP, Editura RISOPRINT, 2003, p.224, ISBN 973-656-361-8.</li> </ol>   |
| Laboratory guides   | <ol style="list-style-type: none"> <li>1. <b>MARCU, V., ANTAL, T., BOTA, D.</b>, AutoCAD - Îndrumător de laborator, At. de multiplicare al Univ. Tehnice Cluj-Napoca, 1995, p.104.</li> <li>2. <b>MARCU, V., ARGHIR, M., MORAR, S., ANTAL, T.</b>, Informatică tehnică, vol. 1 - Lucrări de laborator, At. de multiplicare al Univ. Tehnice Cluj-Napoca, 1995, p.83. (Modelare și simulare)</li> <li>3. <b>ANTAL, T. A.</b>, Elemente de Java cu Jdeveloper - îndrumător de laborator, Editura UTPRES, 2013, p.150, ISBN: 978-973-662-827-6 (Modelare și simulare)</li> <li>4. <b>ANTAL, T. A.</b>, Java - Inițiere - îndrumător de laborator, Editura UTPRES, 2013, p. 246, ISBN: 978-973-662-832-0.</li> </ol>   |

## Articles in ISI or ISI Proceedings volumes

1. **T. A. Antal**, A NEW ALGORITHM FOR HELICAL GEAR DESIGN WITH ADDENDUM MODIFICATION, SCIENTIFIC JOURNAL "MECHANIKA", Nr. 3(77), 2009, Kaunas University of Technology, Vilnius Gediminas Technical University, and the Lithuanian Academy of Sciences, p.53-57, ISSN 1392 - 1207.
2. **ANTAL Tiberiu Alexandru**, Worm gears with optimized main geometrical parameters and their efficiency, Journal MECHANIKA, Issue: 1, Pages: 62-65, Published: 2010, Publisher: KAUNAS UNIV TECHNOL, LAISVES AL 55, KAUNAS, 44309, LITHUANIA, IDS Number: 5720J, ISSN: 1392-1207.
3. **ANTAL, T. A.**, A new algorithm for cylindrical worm gears dimensioning based on the hydrodynamic lubrication conditions between the teeth flanks, Journal MECHANIKA, Issue: 4, Pages: 400-403, Published: 2011, Publisher: KAUNAS UNIV TECHNOL, LAISVES AL 55, KAUNAS, 44309, LITHUANIA, IDS Number: 5720J, ISSN: 1392-1207.
4. Carmen Anca Huniadi, **TIBERIU ALEXANDRU ANTAL**, Florin Stamatiu, The effects of Ulipristal on surgically induced endometriosis in a rat model, Gineco.ro 28 (2/2012), <http://www.pulsmedia.eu/inpage/gineco-ro-28-2-2012/>.
5. Carmen Anca Huniadi, Ovidiu L. POP, **TIBERIU ALEXANDRU ANTAL**, Florin Stamatiu, The effects of Ulipristal on Bax/Bcl-2, Cytochrome C, Ki-67 and Cyclooxygenase-2 expression in a rat model with surgically induced endometriosis, European Journal of Obstetrics & Gynecology and Reproductive Biology, 2013, PII: S0301-2115(13)00167-X, doi:10.1016/j.ejogrb.2013.03.022, ISSN: 0301-2115. (<http://www.journals.elsevier.com/european-journal-of-obstetrics-and-gynecology-and-reproductive-biology/>).
6. **ANTAL Tiberiu Alexandru**, ANTAL Adalbert, Geometrical dimensions of helical gears with equalized relative velocities at the beginning and the ending of the meshing, Computational Kinematics, Andres Kecskemethy, Andres Muller Editors, Springer-Verlag, 2009, p. 385-392, Springer-Verlag, ISBN 978-3-642-01946-3, Duisburg, Germany, DOI: 10.1007/978-3-642-01947-0.
7. **ANTAL Tiberiu Alexandru**, Efficiency of crossed helical gears with equalized sliding coefficients, Annals of DAAAM for 2009 & Proceedings of 20th DAAAM International Symposium, Volume 20, No. 1, ISSN 1726-9679, ISBN 978-3-901509-70-4, Editor B. Katalinic, Published by DAAAM International, Vienna, Austria, EU, 2009, p. 1017-1018.
8. **ANTAL Tiberiu Alexandru**, ANTAL Adalbert, A method for the determination of the geometrical dimension of the helical gears with increased lifetime, Published in: Digital Ecosystems and Technologies, 2009. DEST '09. 3rd IEEE International Conference on, Publication Date: 1-3 June 2009, On page(s): 530-533, Location: Istanbul, Turkey, ISBN: 978-1-4244-2345-3, Digital Object Identifier: 10.1109/DEST.2009.5276781.
9. **ANTAL Tiberiu Alexandru**, ANTAL Adalbert, Determination of the geometrical dimensions of the helical gears with addendum modifications based on the specific sliding equalization model, In: Advanced Techniques in Computing Sciences and Software Engineering, Khaled Elleithy Editors, Springer Netherlands, 2010, 85-90, DOI: 10.1007/978-90-481-3660-5\_15 ([http://dx.doi.org/10.1007/978-90-481-3660-5\\_15](http://dx.doi.org/10.1007/978-90-481-3660-5_15)).
10. **ANTAL Tiberiu Alexandru**, ANTAL Adalbert, Helical Gear Dimensions in the Case of the Minimal Equalized Specific Sliding, The 10th, IFToMM International Symposium on Science of Mechanisms and Machines, SYROM'09, October 12 - 15, 2009, Braşov, Romania. (in Editura Springer-Verlag GmbH, Editor: Visa Ion, ISBN 978-90-481-3521-9).

## Research projects as director

1. Research grant AT, numărul 7067 GR/2001 încheiat între MEC prin CNCSIS și UTC-N, tema B11, fază unică. MODEL DE DATE CU IMPLEMENTARE PENTRU ANALIZA ȘI SINTEZA MECANISMELOR PRIN ALGORITMI GENETICI. Valoare totală: 28.550.000 lei.

## Published papers::

1. ANTAL, T. A., Mechanism displacement analysis with AutoLisp in AutoCAD, Series: Applied Mathematics and Mechanics, Nr. 45, 2002, U. T. PRESS - The Technical University from Cluj-Napoca, Romania, p.19-24, ISSN 1221-5872.
2. ANTAL, T. A., An object based approach to planar mechanisms simulation, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, Nr. 48, Vol. I, 2005, p.37-44, ISSN 1221-5872.
3. ANTAL, T. A., Aspects concerning code reusability in planar mechanisms simulation, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, Nr. 48, Vol. I, 2005, p.45-50, ISSN 1221-5872.

2. Research grant A, tema A2, nr. contract 27702/2005. Metodă generală pentru determinarea alunecărilor specifice între flancurile dinților, în cazul angrenajelor. 2005-2007, Valoare totală: 44.000 RON.

Published papers:

1. ANTAL, T. A., Using MathCAD for the sliding equalization, at the points where the gearing starts and ends, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, Nr. 49, Vol. V, 2006, p.51-56, ISSN 1221-5872.
2. ANTAL, T. A., An object oriented implementation for the study of the sliding equalization, at the points where the gearing starts and ends, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, Nr. 50, Vol. I, 2007, p.33-38, ISSN 1221-5872.
3. Tiberiu Alexandru Antal, Adalbert Antal, Mariana Arghir, Determination of the addendum modification at helical gears, at the points where the meshing starts and ends, based on the relative velocity equalization criterion (p 10965-10966), Proceedings in Applied Mathematics and Mechanics - PAMM Journal, Volume 8, Issue 1, p.10965-10966 - December 2008 (10003-10988), Published Online: Feb 26 2009 1:06AM, DOI: 10.1002/pamm.200810965, ISSN: 1617-7061.
4. T. A. Antal, A new algorithm for helical gear design with addendum modification, scientific journal Mechanika, Nr. 3(77), 2009, Kaunas University of Technology, Vilnius Gediminas Technical University, and the Lithuanian Academy of Sciences, p.53-57, ISSN 1392 - 1207.
5. ANTAL Tiberiu Alexandru, ANTAL Adalbert, Geometrical dimensions of helical gears with equalized relative velocities at the beginning and the ending of the meshing, Computational Kinematics, Andres Kecskemethy, Andres Muller Editors, Springer-Verlag, 2009, p. 385-392, Springer-Verlag, ISBN 978-3-642-01946-3, Duisburg, Germany, DOI: 10.1007/978-3-642-01947-0.
6. ANTAL Tiberiu Alexandru, ANTAL Adalbert, A method for the determination of the geometrical dimension of the helical gears with increased lifetime, Published in: Digital Ecosystems and Technologies, 2009. DEST '09. 3rd IEEE International Conference on, Publication Date: 1-3 June 2009, On page(s): 530-533, Location: Istanbul, Turkey, ISBN: 978-1-4244-2345-3, Digital Object Identifier: 10.1109/DEST.2009.5276781.
7. ANTAL Tiberiu Alexandru, Efficiency of crossed helical gears with equalized sliding coefficients, Annals of DAAAM for 2009 & Proceedings of 20th DAAAM International Symposium, Volume 20, No. 1, ISSN 1726-9679, ISBN 978-3-901509-70-4, Editor B. Katalinic, Published by DAAAM International, Vienna, Austria, EU, 2009, p. 1017-1018.

3. Research contract nr. 15/18.II.2013 încheiat între UTCN și S.C. EURO PROIECT CONSULTING GRUP S.R.L. pentru "implementare program de identitate vizuală", valoarea 5.000 RON.

Recognition of scientific contributions

Member of public body of Hungarian Academy of Sciences.



Guest Professor at HAMK University of Applied Sciences, Finlanda.



Scientific reviewer at international conferences: Human System Interactions, European Conference on Mechanism Science, Human System Interactions, International Conference on Software Business.

Citations in ISI and BDI journals: 8 ISI, 6 BDI.

26.VIII.2013, Ia Cluj

Conf.dr.ing. ANTAL Tiberiu Alexandru