ANDREEA ALEXANDRU

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OBJECTIVE

To make an impact on the world of science through engineering research projects.

EDUCATION AND QUALIFICATIONS

2011 - present   **Polytechnic University of Bucharest - Faculty of Automatic Control and Computer Science**
- Scored 9.89 (out of 10) at admission (ranked 3rd in the System Engineering Section)
- Graduated 1st year with 9.87 (first on Faculty)
- Courses : Electrotechnics, Linear Algebra, Real and Complex Analysis, Mechanics, C Programming, Data Structures and Algorithms (Java), General Physics (Optics, Statistics, Thermodynamics, Quantum Physics)
- Graduated 2nd year with 9.60
- Courses : Object Oriented Programming, Analogical and Digital Electronics, Numerical Methods, Signal and Systems, Theory of Automated Systems, Optimisation Techniques
- Will receive a Bachelor of Science

2011   **Romanian Baccalaureate** (Mathematics, Physics, Romanian language)
- Scored 9.43 (out of 10)

2007 - 2011   **"Tudor Vianu" National High School of Computer Science**
- Graduated with 9.93 (out of 10)
- Participated at the National Olympiad of Physics (2011)
- Participated at the International Contest "Romanian Masters of Sciences", Physics section (2011)

WORK EXPERIENCE

2012 - present   **Scholarship at Research Centre for Computer Aided Electrical Engineering (CIEAC), Assistant researcher at ToMeMS programme (http://mems.lmn.pub.ro/)**
- Responsibilities covering areas such as pre-processing geometric information, electric circuits analysis, code optimisation, analytical and experimental results validation
- Achieved understanding of advanced concepts in multiphysical approach, together with discerning of coupled phenomena
- Gained insight of an international research project and teamwork

PROJECTS

10.2012 - 01.2013   **Group Leader at "Distance evaluation" between medical images in order to determine the oncologic disease evolution**
- Involved in-depth investigation concerning medical image filtering, programs for determining differences between images
- Development of organisational skills, writing reports and supervising the team results

AWARDS

2013
- 1st prize at Student Scientific Communications Session, P.U.B., Electrotechnics Department, with "GDS2M - Preprocessing Tool for MEMS Devices"

2012
- 2nd prize at National Contest of Mechanics "Andrei G. Ioachimescu"
- 3rd prize at Student Scientific Communications Session, P.U.B., Applied Mathematics section, with "Interior Dirichlet Problem for a disk applied in determination of electromagnetic field, using MATLAB" project
- Awarded bursaries for excellent results in university

2011-2007
- Awarded bursaries for excellent results in high school
- National Physics Contest "Phi" (2010-2nd prize, 2009-2nd prize, 2008-3rd prize)

PUBLICATIONS

2013
- Andreea Alexandru, Sorin Lup, Bogdan Dita, *GDS2M Preprocessing Tool for MEMS Devices*, Proceedings of the 8th International Symposium on Advanced Topics in Electrical Engineering, May 23-25, 2013, Bucharest, Romania, ISBN 978-1-4673-5978-8, ISI and IEEE Xplore

COMPUTER SKILLS
- Programming: C#, C, MATLAB, Java, LaTeX, HTML, SQL, LTSpice IV
- Microsoft Office, Oracle Application Express
- Operating Systems: Windows , UNIX (Ubuntu)
- Certificate in Computer use(2011) - ActionScript project : "Interactive electrodynamics lessons"

LANGUAGES
- Mother tongue : Romanian
- English (understanding - advanced, speaking - advanced, writing - advanced)
- French (understanding - intermediate, speaking - intermediate, writing - intermediate)

IELTS Band Score 8/9 (2010)
CAE Grade B (2010)
3 weeks semi-intensive French Course at Verlaine-Langue Institute, Paris

LEISURE INTERESTS
- Travelling, festivals
- Astronomy, electrical and acoustic guitar (self-taught)
- Sports : Skiing, Tennis

VOLUNTARY WORK
- Romanian Red Cross (2010-2011)
- AIESEC „Bucurestiul fluiera fault" (2009, 2010)
- Guide for foreign students at "Romanian Masters of Sciences" (2010)

REFERENCES
Available upon request