# **Curriculum Vitae**

### Personal information

First name SURNAME | Kinga ALBERT

Address | Bunsenstraße 16, Göttingen (Germany)

Mobile +49 16 215 274 01

E-mail <u>kinga.albert@yahoo.com</u>

Citizenship Romanian, Hungarian

Date of birth | 28 January 1990



## Work experience

Dates July 2015 - Present

Position | PhD Student

Activity On-board calibration method for the PHI instrument on the Solar Orbiter mission.

Supervisor: Dr. Johann Hirzberger, Prof. Dr.-Ing. Harald Michalik

Name and address of employer | Max Planck Institute for Solar System Research

Justus-von-Liebig-Weg 3, 37077, Göttingen, Germany

http://www.mps.mpg.de/en

Type of business or sector | Space Physics Research

Dates | September 2014 – June 2015

Position | Young Graduate Trainee

Activity | Study of the Time Triggered Ethernet (TTE) communication protocol for future satellite platform and

launcher applications.

Project coordinators: Jean-Francois Dufour, Girogio Magistrati

Name and address of employer | European Space Agency, European Space Research and Technology Centre (ESTEC),

**Data Systems Division** 

Keplerlaan 1, 2201AZ, Noordwijk, The Netherlands

http://www.esa.int/About Us/ESTEC

Type of business or sector | Space Industry

Dates June 2013 – September 2013

Position | Student intern

Activity | Software development for a simulation program tracking ion motion in the magnetosphere of Earth.

Project responsible: Dr. Hans Nilsson

Name and address of employer | Swedish Institute of Space Physics, IRF (Institutet för rymdfysik),

Solar Terrestrial Physics group

Rymdcampus 1, 981 28, Kiruna, Sweden

http://www.irf.se/program/stp/

Type of business or sector | Space Physics Research

Dates | April 2011 – August 2012

Position | Software Developer

Activity | Application software development of dashboard instrumentation for commercial vehicles.

Name and address of employer | Continental Automotive Romania S.R.L.

Calea Martirilor 1, 300724 / Str. Siemens 1, 300704, Timişoara, Romania

http://www.conti-online.com/generator/www/ro/en/continental/hr/general/home/index en.html

Type of business or sector | Automotive Industry

**Awards** 

May 2014 Date

Title

**Bengt Hultqvist Prize** 

Description

The scholarship rewards students of Lulea University of Technology for their successful academic studies in a space educational program, and for their initiatives in international exchange.

Awarding Institution

Kiruna Rotary Club

#### Education

Dates

September 2012 - August 2014

Title of qualification

Master of Science (120 credits) - Space Technology

Name and type of Institution

Luleå Tekniska Universitet (University)

Kiruna (Sweden)

Profile

Spacecraft Design

Student project

Magnetic Attitude Determination System (MADS): the design, implementation and testing of an attitude sensor, based on a magnetometer, for small sized spacecraft. The system was tested on a stratospheric balloon provided by Luleå University of Technology (LTU) and a supersonic student rocket, in

collaboration with Centre National d'Etudes Spatiales (CNES).

Main activities and responsibilities: Project management, System design, Software development

Project coordinators: Dr. Thomas Kuhn, Kjell Lundin

Final thesis

SvalPoint: A Multi-track Optical Pointing System

Design and development of an online pointing system for The Kiell Henriksen optical observatory on Svalbard, studying the middle and upper atmosphere. SvalPoint controls multiple instruments based on information from a target location program.

Project responsible and supervisor on sight: Dr. Fred Sigernes, Examiner: Dr. Jana Mendrok

Dates

October 2008 - July 2012

Title of qualification

Bachelor in Engineering (240 credits) - Computer Science

Name and type of Institution

Universitatea "Politehnica" din Timişoara (University)

Timişoara (Romania)

Profile

Computer Science and Information Technology

Final thesis

Fuzzy Logic Algorithms for Queue Management in DiffServ Architectures

Design and testing of a queue management algorithm using fuzzy logic for quality of service insurance in

TCP/IP. Project coordinator Dr. Doru Todinca

#### Personal skills

Mother tongue Other languages Hungarian

English (proficient), Romanian (proficient), German (basic), Swedish (basic)

## Social skills

- Good team spirit and intercultural awareness gained through various project works.
- Good communication skills gained through team work, teaching and presentations.
- Leadership skills gained through project responsible and leader role.
- Independent work skills gained through various project works.

#### Professional skills

- Communication techniques: Time Triggered Ethernet, CAN, SpaceWire, SpaceFibre, MIL-STD-1553
- Programming Languages: C, Embedded C, Assembly, Pascal, Fortran, Java, C++, MATLAB, LogiCAD, MATLAB Simulink
- Hardware description languages: VHDL, Verilog
- Operating System competences: Windows, Unix based operating systems, RTOS
- CAD: NX 8.5
- Tools: Eclipse, Doors, PVCS Version Management, CANoe, Omnet++, Wireshark
- Strengths and interests:
  - Space instrumentation, payloads
  - Spacecraft system engineering
  - On-board data handling, digital system design