Johannes Güttler

Ph. D. student in Physics – Fluid Dynamics
M. Sc. Space Technology
B. Eng. in Mechatronics

Studies

Sep. 2014 – Nov. 2016	**Space Technology (M.Sc.)** Luleå University of Technology (LTU), Sweden	**Fields of study** Solar and planetary physics, Atmospheric science, Remote sensing, Space Environment
Oct. 2013 - Sep. 2014 *(1 year)*	**Automation and Control Engineering (M. Sc.)** Universität Duisburg- Essen Germany	**Fields of study** Mathematics, Automation technology, Computer Science. Note: left program before finishing to study M.Sc. above.
Oct. 2008 - Sep. 2012 *(4 years)*	**Mechatronics (B. Eng.)** University of Applied Sciences Aschaffenburg, Germany	**Specializations** Microsystems engineering Design engineering and development
Sep. 2009 - Dec. 2009 *(4 months)*	**Semester abroad** University of Applied Sciences Seinäjöki, Finland	**Field of study** Automotive engineering

Work Experience

Aug. 2010 - Feb. 2011 *(6 months)*	**German Aerospace Center (DLR)** Institute of Composite Structures and Adaptive Systems, Brunswick, Germany	**Structural mechanics** Interface programming for Finite Element Analysis (FEA) tools; Development of a new algorithm for an existing software solution; Validation of aircraft models;
Feb. 2010 - Mar. 2010 *(2 months)*	**Siemens Industry Sector** Drive Technologies, Large Drives, Nuremberg, Germany	**Order Processing Center Products** Creation of production sequences using MS Project; Inspection and renewal of an inventory register; Delay analysis
Jun. 2008 - Jul. 2008 *(2 months)*	**Siemens Industry Sector** Drive Technologies, Large Drives, Nuremberg, Germany	**Order Management/Engineering Motors** Renewal and creation of coil schematics for one-layer and two-layer rotary current coils
Sep. 2007 - Jun. 2008	**Bavarian Red Cross**	**Paramedic (Civilian Service)**

(10 months)	Schwabach, Germany	Ambulance and emergency service, including an hospital internship
Oct. 2012 - Sept. 2013	**Gap year**	St. James path, halfmarathon, traveling Website programming, smale scale jobs

Projects

Master thesis	**Field-Site Prototype for HABIT (FSP-HABIT)** www.ltu.se - HABIT	Instrument design and implementation. Consisting of 6 salt vessels with corresponding conductivity sensors. Air and ground temperature, pressure, and relative humidity sensors. For campaigns in Iceland and India.
Rocket Experiments for University Students (REXUS)	**SAline Liquids and Conductivity In the Atmosphere (SALACIA)** www.salacia.se	Assistant project manager and science team. SALACIA will study the properties of Martian salts during a flight through different atmospheric layers on-board a sounding rocket with a scheduled launch in March 2017.
Bachelor thesis	**Optimization of a microfluidic chip for fatty acid analytics**	Refinement of a method for analyzing fatty acids; Insights into the behavior of fluids under high voltage and inside very small (micrometer sized) capillaries
Independent technical research	**Conception and prototype of an iPhone app for the identification of objects**	Setup of a server running image recognition software; Establishment of a working network infrastructure;

Software Knowledge

Automation	IndraLogic, Quest, Simulink
CAD	CATIA V5
Development	MATLAB, Visual Studio 2010, Xcode, Arduino IDE
Finite Element Analysis	ANSYS, PATRAN
Programming languages	C, C++, Objective C
Simulation	Planet Simulator (University of Hamburg)

Languages

German and English, both business fluent (TOEFL iBT 114/120)

Received grants

Travel grants to: Iceland (SNSB), Umeå (SNSB), Gothenburg (LTU)