

## PERSONAL INFORMATION

## Bernhard Großwindhager



Stempfergasse 6/7, 8010 Graz (Austria)  
 (+43) 660 7312462  
 grosswindhager@tugraz.at  
<https://grosswindhager.com>    [at.linkedin.com/in/grosswindhager](https://at.linkedin.com/in/grosswindhager)

Sex Male | Date of birth 18/09/1988 | Nationality Austrian

## EDUCATION AND TRAINING

- |                       |   |
|-----------------------|---|
| 01/04/2016–Present    | <b>Doctoral programme</b> <span style="float: right;">Ph.D.</span><br>Graz University of Technology, Graz (Austria)<br>Information and Communications Engineering   |
| 22/10/2018–31/01/2019 | <b>Visiting Researcher</b><br>University of California, Berkeley (United States)  |
| 23/03/2012–28/10/2014 | <b>Master's programme</b> <span style="float: right;">Dipl.-Ing.</span><br>Graz University of Technology, Graz (Austria)<br>Electrical Engineering - Information- and Communications Technology / Digital Signal Processing<br>Master's Thesis: 'Implementation and Verification of a Standards-Compliant Car-2-X Demonstrator' |
| 11/02/2013–05/07/2013 | <b>Exchange semester</b><br>Delft University of Technology, Delft (Netherlands)<br>Supported by a scholarship from AVL List GmbH Graz, Austria  |
| 01/10/2008–06/03/2012 | <b>Bachelor's programme</b> <span style="float: right;">BSc</span><br>Graz University of Technology, Graz (Austria)<br>Electrical engineering – Microelectronics and Circuit Technique<br>Bachelor Thesis: 'Research and Development of ASICs in Biomedical Devices'  |
| 09/09/2002–13/06/2007 | <b>Federal Secondary College</b><br>HTL Steyr, Steyr (Austria)<br>Federal Secondary College for Electronics and Computer Engineering  |

## WORK EXPERIENCE

- |                       |   |
|-----------------------|---|
| 01/04/2016–           | <b>Research Assistant</b><br>Graz University of Technology, Graz (Austria)<br>Doctoral programme in Information and Communications Engineering  |
| 09/02/2015–31/03/2016 | <b>Development Manager, R&amp;D Electric/Electronics</b><br>MAGNA STEYR Engineering AG & Co KG, Graz (Austria) <ul style="list-style-type: none"> <li>▪ Project manager R&amp;D Connectivity &amp; Car-2-X</li> <li>▪ Verification and validation of advanced driver assistance systems (ADAS) and automated driving functions (ADF)</li> <li>▪ Indoor/outdoor positioning systems for vehicles</li> </ul>                                  |
| 18/11/2013–17/10/2014 | <b>Master's Thesis</b><br>Virtual Vehicle Research Center and MAGNA STEYR Engineering AG & Co KG, Graz (Austria)<br>Topic: 'Implementation and Verification of a Standards-Compliant Car-2-X Demonstrator' <ul style="list-style-type: none"> <li>▪ Implementation of six Car-2-X use cases on embedded platform in C and graphical visualization on Android tablet PC</li> <li>▪ Integration of the system into series vehicles</li> </ul> |
| 01/03/2012–30/06/2012 | <b>Study assistant</b><br>TU Graz - Institute of Microwave and Photonic Engineering, Graz (Austria)   |

20/07/2011–15/09/2011

### Research stay in Japan

Asahikawa Medical University, Department of Neurosurgery, Asahikawa, Hokkaido (Japan)

- Verification of Electrocorticography (ECoG)-based brain-computer interfaces (BCI) and of real-time brain mapping methods

01/11/2008–30/09/2012

### Research and Development engineer

g.tec Guger Technologies OG, Graz/Schiedlberg (Austria)

Development (Software / Hardware / Signal Processing):

- Implementation of applications and bio-signal processing algorithms with MATLAB/Simulink
- Testing and optimizing of EEG-based brain-computer interfaces (motor imagery, P300, SSVEP)
- Project manager of the signal processing part of the g.tec software project cortiQ
- Development of an electrode impedance measurement system (EEG, EMG,...)
- Bachelor thesis with the topic „Research and Development of ASICs in Biomedical Devices“
- Programming of microcontroller applications and design of printed circuit boards

07/04/2008–20/06/2008

### Automation engineer (International internship in the USA)

Advanced Machine & Engineering Co., Rockford, IL (United States)

International internship in the United States.

- Designing of PLC control software (Mitsubishi systems) for industrial bandsaws

01/07/2007–31/03/2008

### Military service

Austrian Armed Forces, Amstetten (Austria)

03/07/2006–31/07/2006

### Hard-/Software Development

g.tec Guger Technologies OG, Schiedlberg (Austria)

- Development of a BCI spelling machine to support locked-in patients to communicate with their environment despite their inability to move mouth or eyes

## PERSONAL SKILLS

Mother tongue(s)

German

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Spanish	A1	A1	A1	A1	A1
Dutch	A1	A1	A1	A1	A1

Other skills

Project management, Nationally certified skiing instructor, Certified amateur radio operator

## ADDITIONAL INFORMATION

Awards:

- Marshall Plan Scholarship 2018
- Best Demo @ SenSys 2017, Best Poster @ EWSN 2017
- Magna Steyr Innovation Award 2016 - Top 5
- GIT Award 2007 of the Austrian Society of Electrical Engineering for Achievements in Information and Communication Technology
- 1st Place “Innovation & Economy in Upper Austria” (TMG-Award) 2007  
Category: “Special Award - Health”
- 2nd Place “T-Systems Young Innovation Award” 2007