## PERSONAL INFORMATION

# Roland Eric BERKEMEIER

Email: ro.berkemeier@outlook.com

Sex: **Male**

Date of birth: **1985-10-19**

Place of birth: **Singapore, the Republic of Singapore**

Nationality: **German**

Family status: **Unmarried**

## PERSONAL STATEMENT

A biology graduate with strong organisational skills and a fondness of teaching, now interested in brain-computer interface research and neurorobotics

## WORK EXPERIENCE

**Oct 2013 - present**

### Research Associate at the University Medical Center Freiburg

Dpt. of Neurosurgery, Translational Neurotechnology Lab (www.tnt.uni-freiburg.de)

- Project-related research for DFG-funded BrainLinks-BrainTools cluster of excellence, esp. within the interdisciplinary neurobiological-neurophilosophical project "Mechanized Brains"
- Conception and execution of electrophysiological experiments
- Development of computational processing pipelines for electrophysiological and fMRI imaging data
- Teaching of undergraduate and graduate courses
- Supervision of undergraduate and graduate short-term research projects and seminars
- Evaluation and grading of undergraduate (B.Sc.) research and theses
- Evaluation of graduate (M.Sc.) research and theses
- IT systems and website administrator
- Lab health and safety officer

**Achievements in this role include:**
- Development of a new process for surface-constrained, multi-scale fMRI analyses
- Acquisition of DFG research funding (within grant no. EXC 1086)
- Presentation of research at international conferences and workshops (e.g. OHBM Conference Honolulu 2016, Symposium on Cognitive Neuroscience Prague 2016, DGKN Conference Leipzig 2017)
- Organisation of Early-Career Scientists' Workshops

Sector Neuroscientific research and management

**Jun 2013 - Sep 2013**

### Student Assistant at the University Medical Center Freiburg

Dpt. of Neurosurgery, Translational Neurotechnology Lab (www.tnt.uni-freiburg.de)

- Project-related research
- IT systems administrator

Sector Neuroscientific research

**Mar 2012 - Jan 2014**

### Student Assistant at Nagoya University European Center (Freiburg)

(www.nagoya-u.ac.jp/en)

- Coordination with administrative services at Albert-Ludwigs-University Freiburg
- Organisation of seminars and visits by Nagoya University officials and guest researchers
- Public relations work at the international "Study in Japan" Fair, Berlin 2014
- Translating and interpreting (German/French to English)
- Written correspondence for Nagoya University (German, English, French, Japanese)
- IT systems and website administration

Sector International Academic management

## EDUCATION AND TRAINING

**Oct 2010 - May 2013**

### German University Diploma (M.Sc. equivalent)

Faculty of Biology, Albert-Ludwigs-University Freiburg, Germany

- **Major:** Neurobiology and –physiology
- **Minors:** Microbiology, Biomechanics, Japanese language

※ Sep 2009-Aug 2010:
  International Exchange Student at Matsuyama University, Ehime, Japan
  supported by JASSO Student Exchange Support Program Scholarship

## PERSONAL SKILLS

**Mother tongues**

English, German

**Other languages**

| UNDERSTANDING | | SPEAKING | | WRITING |
|---|---|---|---|---|
| Listening | Reading | Spoken interaction | Spoken production | |
| French | | | | |
| C2 | C2 | C2 | C2 | C2 |
| Baccalauréat (French Certificate of Secondary Education) | | | | |
| Japanese | | | | |
| C1 | B2 | C1 | B2 | B2 |
| Not certified. Estimated aptitude is JLPT N2; currently preparing for JLPT N1. | | | | |

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

**Communication skills**

- Good intercultural and multilingual communication skills gained through my work in a large and ethnically diverse research lab, and through my volunteer work at local German-Japanese cultural events (e.g., annual fundraisers for the NPO *Okinawa Kuminosato*: http://kuminosato.net/english-2/)
- Experienced interpreter (English-German-French-Japanese) gained during international kyudo (Japanese archery) seminars and my work with the Nagoya University European Center

**Organisational / managerial skills**

- Leadership and teaching skills gained through my handling of undergraduate courses (since 2014), and as a kyudo instructor (since 2011)
- Good organisational skills gained as a member of the BrainLinks-BrainTools Junior Scientist organisational committee

**Job-related skills**

- Experienced in prepping of test subjects for electrophysiological and fMRI measurements

**Digital competence**

| SELF-ASSESSMENT | | | | |
|---|---|---|---|---|
| Information processing | Communication | Content creation | Safety | Problem solving |
| Proficient | Proficient | Proficient | Proficient | Proficient |

Levels: Basic user  - Independent user  -  Proficient user
Digital competences - Self-assessment grid

- Comfortable in Mac OS, Microsoft Windows, Ubuntu
- Good command of office suite (word processor, spread sheet, presentation software)
- Good command of image editing software gained as an amateur photographer
- Good command of MathWorks MATLAB, Python
- Intermediate command of HTML5 and CSS gained as website administrator; can create simple HTML animations and interactive objects (examples: http://codepen.io/matsuhime/)

**Driving licence**

EU class B driving licence up to 3.5 t

## ADDITIONAL INFORMATION

Publications
Presentations
Conferences

**Peer-reviewed conference papers:**
▪ P. Kellmeyer, R. Berkemeier, T. Ball; *Varying the spatial observation scale in the analysis of an fMRI language task leads to substantially differing functional interpretations*. DGKN 61st Annual Conference, Leipzig 2017, to be published in Clinical Neurophysiology.

**Poster presentations:**
▪ R. Berkemeier, O. Speck, T. Ball; *Surface-based multi-scale network analysis of visuo-motor brain activity: a human 3T fMRI study*. OHBM Annual Meeting Honolulu 2015.

**Invited talks:**
▪ R. Berkemeier, J. Hammer; *Robust representation of movement speed in high-gamma EEG?* Symposium on Cognitive Neuroscience, Motol University Hospital, Prague 2016.
▪ R. Berkemeier; *Science Jam: Literatur und Wissenschaft treffen sich zum Jüngsten Gericht*. Festival science+fiction, Basel 2017.

References are available on request.