

# Fabian E. Gruber

# Experience

#### Vocational

2013–2018 **Research Assistant**, *Institute of Geography, University of Innsbruck*, Innsbruck. Research projects:

- Shallow erosion dynamics in mountain grasslands of South Tyrol: Monitoring, process analysis and mitigation measures (EroDyn)
  - Geodata management: aquisition and storage of available geospatial data
  - Accuracy assessment for geographical object-based modelling of land cover with Python and Open Source GIS
  - Regional-scale landslide susceptibility mapping
- Terrain Classification of ALS Data to support Digital Soil Mapping
  - Landform delineation with statistical learning approaches and automated landform classifications
  - Field Soil Survey
  - Collaboration on the development of the Java App SEPP (Soil Evaluation in Planning Procedures)

# 2011–2013 Research Assistant, Institute of Applied Geology, BOKU, Vienna.

Research projects:

- Hazard assessment for an expected dam break flood in the Hunza Valley, Pakistan: A combination of GIS, Remote Sensing, and computer simulation techniques
  - Dam breach modeling with BREACH
  - Flood modeling with FLO-2D
- Poverty Alleviation through Mitigation of Integrated High-Mountain Risk (PAMIR)
  - Mapping geomorphological hazards, glaciers, and vulnerable infrastructure with remotely sensed data

#### 2009–2010 **Project Assistant**, *Institute of Applied Geology, BOKU*, Vienna.

Research project:

- Remote Geohazards Assessment in Tajikistan (TajHaz)
  - Mapping geomorphological hazards and glacial lakes with remotely sensed data
  - Field survey in Tajikistan

## Miscellaneous

#### 2016–2017 Educational Leave (Bildungskarenz).

devoted to work on PhD thesis with the working title 'Digital terrain analysis to support field soil survey'

2016–2017 **Lecturer**, *Institute of Geography, University of Innsbruck*, Innsbruck.

Exercises in Statistics ( $\ddot{U}$ bungen zur Statistik): Introduction to statistics with R for Bachelor's students

2010–2011 **Student tutor**, *University of Natural Resources and Life Sciences (BOKU)*, Vienna. Tutoring for students using ArcGIS

## Master thesis

title The 2010 Attabad Landslide Dam Lake: modeling and prediction of Lake Outburst Floods

supervisors Jean F. Schneider and Martin Mergili

## Education

2002–2011 Diploma Study of Environmental Engineering and Water Management at the University of Natural Resources and Life Sciences (BOKU), Vienna

1993–2001 Linz International School Auhof, Linz: Austrian Matura (school leaving certificate, university entry qualification) and International Baccalaureate (IB)

1991–1993 Elementary School Linz-Pichling

1989–1991 Lincoln Elementary School Pittsburgh, PA, USA

# Languages

German Native Language

English Fluent

Spanish Conversant

French Conversant

# Computer skills

Operating Windows, Linux (Ubuntu) Scripting R, Python, Bash

systems

Geographic GRASS, QGIS, SAGA, ARCGIS Word MS Word, Libreoffice, LATEX with

information processing Texmaker

systems

Image GIMP, Inkscape Misc. RStudio, MS Office, FLO-2D,

processing software ENVI-Sarscape

#### Interests

Horticulture Participating in a communal gardening project

Traveling Extensive traveling in Central and South America, Central Asia, Southeast Asia and

Madagascar