Sina Rüeger

✉ sina.rueeger@gmail.com
🖱 sinarueeger.github.io
◉ sinarueeger
in sinarueeger
January 23, 2018

Areas of biostatistical and data analytical experience

Statistical modelling	Regression modelling techniques (linear mixed effects, nonlinear, generalised additive, robust and survival models), analysis of variance, model & variable selection, multiple testing approaches.
Data mining	Data dimension reduction, classification, unsupervised clustering.
Data visualisation	Visual representation of concepts and results.
Data pre-processing	Data storage & documentation, quality control, missing data handling.
Trackability of work	Version control, documentation with knitr/rmarkdown and best-practices in programming
Domain knowledge	Genomics, Parkinsons disease, bariatric surgery, hepatitis C & other viral infections, solid organ transplantation, multiple sklerosis, human height, critical care patients.

Education

Oct-2013 – (Spring 2018)	**PhD student**, *Statistical Genetics Group, Institute of Social and Preventive Medicine, Lausanne University Hospital (CHUV)*, Lausanne, Switzerland, supervised by Prof. Zoltán Kutalik. **Topic**: Integrative statistical analysis of -omics and genome-wide association studies data.
Feb-2009 – Jun-2011	**Master of Science in Engineering**, *Zurich University of Applied Sciences*, Winterthur, Switzerland.
Oct-2005 – Oct-2008	**Dipl. Ing. Data Analysis and Process Design**, *Zurich University of Applied Sciences*, Winterthur, Switzerland.

Employment

Feb-2013 – Sep-2013	**Internship**, *Statistical Genetics Group, Department of Medical Genetics*, University of Lausanne, Lausanne, Switzerland.
Feb-2012 – Mar–2013	**Biostatistician**, *Division of Biostatistics, ISPMZ (now EBPI)*, University of Zurich, Zurich, Switzerland.
Jan-2012 – Aug-2012	**Biostatistician**, *Center of clinical nursing science*, University Hospital Zurich, Zurich, Switzerland.
Mar-2009 – Jan-2012	**Research Assistant**, *Institute of Data Analysis and Process Design, Zurich University of Applied Sciences*, Winterthur, Switzerland.
Jul-2007 – Sep-2007	**Internship**, *Official Statistics Zurich*, Zurich, Switzerland.

Computing skills

Statistics/Programming	**R** [highly proficient], **Matlab** [familiar], **Java** [familiar], **SQL** [familiar]
Genomics tools	**Plink**, **QCTOOL**, **GTCA**, ...
Support	**GitHub**, **LaTex**, **emacs**, **Affinity/AdobeIllustrator/Inkscape**
R	Daily used for statistical computing and data visualisation; familiar with the architecture of R, package development and best-practices.
Computing experience	Five years of experience using high performance clusters for analysis and storage of large files.

Other activities

R-Ladies community Founding member and co-organiser of R-Ladies Lausanne. R-Ladies is a world-wide organization to promote gender diversity in the R community.

Languages

German [native speaker, C2], **English** [fluent, C1], **French** [good command, B1]

Awards

Apr-2017 *The 'Human Heredity' Best Student Platform Presentation Award* at the European Mathematical Genetics Meeting in Tartu, Estonia.

Mar-2017 *Poster prize* at the ePerMed Workshop about 'Functional annotation of genome-wide variants' in Lausanne, Switzerland.

May-2016 *Lodewijk Sandkuijl Award* for an outstanding talk in the field of complex genetics and statistical genetics at the European Society of Human Genetics Conference, Barcelona, Spain.

Output list

Main publications

Sina Rüeger, Aaron McDaid, and Zoltán Kutalik. Improved imputation of summary statistics for realistic settings. *bioRxiv*, page 203927, 2017b

Sina Rüeger, Aaron McDaid, and Zoltán Kutalik. Evaluation and application of summary statistic imputation to discover new height-associated loci. *bioRxiv*, page 204560, 2017a

Sina Rüeger et al. Impact of common risk factors of fibrosis progression in chronic hepatitis C. *Gut*, 64(10):1605–1615, 2015