



Dr. Daniel Wiegreffe

Curriculum Vitae

Personal Information

Fullname Daniel Wiegreffe
Born Name Gerighausen
Date of Birth 14.10.1989
Place of Birth Lingen (Ems)
Adress Image and Signal Processing Group
Institut für Informatik
Augustusplatz 10
04109 Leipzig
Email daniel@informatik.uni-leipzig.de
Nationality German
Civil Status Married, three children

Education

- 06/2019 **Dr. rer. nat., Computer Science,**
Universität Leipzig,
Thesis Title: Visual Analysis of Form and Function in Computational Biology,
Supervisor: Prof. Scheuermann.
- 03/2015 **Master of Science, Computer Science,**
Universität Leipzig,
Thesis Title: TiBi-3D - a Guide through the World of Epigenetics,
Supervisor: Prof. Scheuermann, Prof. Prohaska.
- 10/2013 – **Study of Master of Science, Computer Science,**
03/2015 *Universität Leipzig.*
- 09/2013 **Bachelor of Science, Computer Science,**
Universität Leipzig,
Thesis Title: Kombination von K-means++ Clustering und PCA zur Analyse von Chromatin-Daten,
Supervisor: Prof. Scheuermann.
- 10/2009 – **Study of Bachelor of Science, Computer Science,**
09/2013 *Universität Leipzig.*

08/2002 – **Gymnasium, Johanneum,**
06/2009 Lingen(Ems),
Gained university entrance qualification.

Professional Experience

- 10/2019 – **Lectureship,**
03/2020 *Universität Leipzig,*
Bachelor course 'Interactive visual data mining'.
- since 08/2018 **Project Coordinator,**
Universität Leipzig,
Coordination of the EFRE project 'Data Mining and Value Creation'.
- since 04/2015 **Scientific Research Assistant/PhD student,**
Universität Leipzig,
Developing new visualizations for Big Data from biological sources.
- since 8/2013 **Associate,**
Gurkware GbR,
Development and marketing of software solutions.
- 4/2013 – **Student Assistant,**
12/2014 *Universität Leipzig,*
Assistance in the 'ChromatinVis' project,
Supervisor: Prof. Scheuermann, Prof. J. Prohaska, Dr. Zeckzer.
- 10/2012 – **Student Assistant,**
02/2013 *Universität Leipzig,*
'Grundlagen der Informatik und Numerik',
Supervisor: Dr. Meiler.
- 09/2012 – **Student Assistant,**
09/2012 *Universität Leipzig,*
Remidial course 'c programming',
Supervisor: Dr. Meiler.
- 05/2012 – **Student Assistant,**
07/2012 *Universität Leipzig,*
'Objektorientiertes Programmieren Praktikum',
Supervisor: Dr. Meiler.
- 05/2010 – **IT Administrator,**
04/2012 *Lawyer Füßer und Kollegen.*

Publications and Conferences

- 2019 **Application Paper**, *LocalCompanies: Visual Analytics of spatial aligned regional companies*, Hausdorf, Niekler, Wiegrefe, LEVIA 2019.
- 2018 **Summary Paper**, *Big Data Competence Center ScaDS Dresden/Leipzig: Overview and selected research activities*, Rahm, Nagel, Peukert, Jäkel, Gärtner, Wiegrefe, Zeckzer, Lehner, Datenbanken-Spektrum.
- 2018 **Method Paper**, *RNApuzzler: Efficient Outerplanar Drawing of RNA-Secondary Structures*, Wiegrefe, Alexander, Stadler, Zeckzer, Oxford Bioinformatics.
- 2018 **Research Note**, *The Sierra Platinum Service for generating peak-calls for replicated ChIP-seq experiments*, Wiegrefe, Müller, Steuck, Zeckzer, Stadler, BMC Research Notes.
- 2018 **Application Paper**, *Analyzing Histone Modifications Using Tiled Binned Clustering and 3D Scatter Plots*, Zeckzer, Wiegrefe, Müller, WSCG 2018 - Pilsen.
- 2018 **Conference Talk**, *Introduction of the Supergenome Browser*, 33rd TBI Winterseminar in Bled(Slovenia).
- 2017 **Conference Talk**, *RNApuzzler IV*, 15th Bioinf Herbstseminar in Doubice(Czech republic).
- 2017 **Application Paper**, *iDotter - an interactive dot plot viewer*, Gerighausen, Hausdorf, Zänker, Zeckzer, WSCG 2017 - Pilsen.
- 2016 **Conference Talk**, *Analyzing Histone Modifications in iPS Cells Using Tiled Binned 3D Scatter Plots*, Zeckzer, Gerighausen, Müller, BDVA 2016 - Sydney.
- 2016 **Method Paper**, *Sierra platinum: a fast and robust peak-caller for replicated ChIP-seq experiments with visual quality-control and -steering*, Müller, Gerighausen, Farman, Zeckzer, BMC Bioinformatics.
- 2016 **Conference Talk**, *RNApuzzler II*, 31st TBI Winterseminar in Bled(Slovenia).
- 2016 **Research Paper**, *A consensus network of gene regulatory factors in the human frontal lobe*, Berto, Perdomo-Sebogat, Gerighausen, Qin, Nowick, Frontiers in Genetics.
- 2015 **Conference Talk**, *RNApuzzler*, 13th Bioinf Herbstseminar in Doubice(Czech republic).
- 2014 **Conference Talk**, *iDotter - An interactive dotplot viewer*, 12th Bioinf Herbstseminar in Doubice(Czech republic).
- 2014 **Shortpaper**, *Using Significant Word Co-occurrences for the Lexical Access Problem*, Feist, Gerighausen, Konrad, Richter, Eckart, Goldhahn, Quasthoff, CogAlex Workshop 2014.
- 2014 **Method Paper**, *Analyzing Chromatin Using Tiled Binned Scatterplot Matrices*, Zeckzer, Gerighausen, Steiner, J. Prohaska, BioVis 2014 – Boston.
- 2014 **Poster**, *ChromatinVis: a tool for analyzing epigenetic data*, Gerighausen, Zeckzer, Steiner, J. Prohaska, at Vizbi 2014 - Heidelberg.
- 2014 **Conference Talk**, *Clustering to the power of 2*, Application of clustering algorithms on epigenetic data, 29th TBI Winterseminar in Bled(Slovenia).
- 2013 **Conference Talk**, *New visualizations of chromatin data*, 11th Bioinf Herbstseminar in Doubice(Czech republic).

Invited Talks

- 2019 **Neue Datenplattform für Renaturierungsprojekte**, NET19, Leipzig.
- 2019 **Introduction to Big Data**, *Programming for Evolutionary Biology 19*, Berlin.
- 2018 **How to handle Big Data**, *Programming for Evolutionary Biology 18*, Berlin.

Programming skills

Java, R, C, C++, and Perl
Android development, HTML, and CSS
extensive Linux and bash skills

Qualifications

Basic certificate in project management (GPM)

Languages

German
English

Special Commitments

- 4/2013 – Member of the student union of Computer Science in Leipzig
04/2014
- 10/2013 – Member of the faculty council of Mathematics and Computer Science in Leipzig
09/2022

Leipzig, January 10, 2020 – Daniel Wiegreffe