



CURRICULUM VITAE

CARL MAXIMLIAN MILLER

PROFILE

Date of birth

*October 2nd, 1984
Muenchberg
Germany*

Nationality

german

Marital status

single

LANGUAGES

German

Mother tongue

English

Business fluent

Spanish

Fluent

French

Basic knowledge

PROGRAMMING SKILLS

Java

Python

R

C++

Databases / MySQL

HTML

PHP

JavaScript

Virtualization

(Docker, Singularity)

Cluster computing

(SGE, SLURM, AWS)

Web Development

(Front- and Back-end)

ADDRESS

Paulanerplatz 1, 2. Entry
81669 Munich, Germany
48 Cedar Ave Apt 2, Highland
Park, 08904, NJ, USA

E-MAIL

max.miller@tum.de
mmiller@bromberglab.org

MOBILE

+49 176 57894940
+1 (201) 920-4439



WORK EXPERIENCE

Research Assistant, PhD (since 10/2015)

Protein function in the context of genetic diseases;
Prediction of functional effects of sequence variants
Rutgers University, NJ, USA; Prof. Yana Bromberg

Research Assistant (10/2013 - 10/2015)

Evolutionary trace of protein structure
LFE Bioinformatik, LMU, Munich, Germany; Prof. Ralf Zimmer

IT-Consulting ROKundCO GmbH (2009 - 2012)

Munich, Germany

Student Research Assistant (10/2006 - 04/2007)

LFE Bioinformatics, Munich, Germany

Student Trainee IT (09/2006 - 04/2007)

Fred Butler (Linde Gas), Munich, Germany

Internship IT (06/2006 - 09/2006)

Fred Butler (Linde Gas), Munich, Germany



PUBLICATIONS

- Zhu, C., **Miller, M.**, Marpaka, S., Vaysberg, P., Rühlemann, MC., Heinsen, F-A., Tempel, M., Lieb, W., Franke, A., Bromberg, Y. (2017) Functional sequencing read annotation for high precision microbiome analysis. (*submitted*)
- Zhu, C., Mahlich, Y., **Miller, M.**, Bromberg, Y. (2017) fusionDB: assessing microbial diversity and environmental preferences via functional similarity networks. *Nucleic Acids Res.* gkx1060, doi:10.1093/nar/gkx1060
- Miller, M.**, Zhu, C. & Bromberg, Y. (2017). clubber: removing the bioinformatics bottleneck in big data analyses. *Journal of Integrative Bioinformatics*, 14(2), pp. -. Retrieved 9 Nov. 2017, from doi:10.1515/jib-2017-0020
- Miller, M.**, Bromberg, Y., & Swint-Kruse, L. (2017). Computational predictors fail to identify amino acid substitution effects at rheostat positions. *Scientific Reports*, 7, 41329.



STUDIES

Master-Studies Bioinformatics Grade 1.4 (4/2009 - 3/2012)
Ludwig-Maximilians-Universitaet Muenchen (LMU), Munich, Germany
Technische-Universitaet Muenchen (TUM), Munich, Germany

Masterthesis: (Grade 1.0)
"Context-based prediction of protein binding strength"

Bachelor-Studies Bioinformatics Grade 2.2 (10/2005 - 3/2009)
Ludwig-Maximilians-Universitaet Muenchen (LMU), Munich, Germany
Technische-Universitaet Muenchen (TUM), Munich, Germany

Bachelorthesis: (Grade 1.7)
"miRNA-TARGET-NETWORKS"

A Levels Grade 2.3 (07/2004)
Justus-von-Gymnasium, Neusaess



CONFERENCES

ISMB 2017 (Prague)
Intelligent Systems for Molecular Biology, Oral presentation

IB 2017 (Denmark)
International Symposium on Integrative Bioinformatics Oral presentation



EXPERIENCE ABROAD

Round-the-world trip (05/2012 - 09/2013)
including South America, the Caribbean, USA, Pacific Islands, Australia, New Zealand, Central-/South-east-Asia, Nepal, India, China, South Africa

Development aid in Bolivia (10/2004 bis 01/2005)
South America, Institution: Hostelling International



EXTRACURRICULAR ACTIVITIES

Member and Board of L'Ensemble Medical at LMU Munich (2010 - 2012)
Management and organization, worldwide tours including Israel, Italy, USA

Sideline job at various areas within ROKundCO (2008 - 2012)
ROKundCO GmbH Munich, Germany

Co-Founder, manager and guitarist of the band Plan B (2005 - 2009)
Management, (show) concepts, and musical arrangements
(www.band-plan-b.com)

Member of the boys choir: Augsburgers Domsingknaben (1993 - 2005)
National and international tours, CD productions and opera participations

Service Wirtshaus in der Au, Munich, Germany (2008 - 2012)

Service Oktoberfest, Munich, Germany (2010, 2011, 2014, 2015)
Muenchner Knoedelei, Velodrom,

