Dr. MARKUS MEIER

Goettingen, Germany
(+49 176) 922 620 93
meiermark13@gmail.com

meiermark.github.io
github.com/meiermark
linkedin.com/in/meiermark13

Technical Skills

Languages: C/C++, Java, C#, Python, Javascript, HTML5, CSS3, R
Other: Data Science

Projects

Pdom – A protein domain predictor based on Bayesian statistics – to be published

- Designed and implemented the tool to decompose the complete protein sequence space into domains, written in C/C++, parallelized with OpenMP
- Built a web server with njinx, Django, PostgreSQL, celery, redis, d3 and docker to visualize the domain predictions

PEnG Motif – A motif discovery tool in DNA sequences - to be published

- Designed and developed the tool to swiftly detect statistically over-represented patterns in sets of DNA sequences, written in C/C++, parallelized with OpenMP

Diversity-enriched Protein Database of Hidden Markov Models for HHblits - to be published

- Boosted protein homology detection sensitivity of HHblits
- Designed and implemented an efficient compression scheme for multiple sequence alignments

Coordinated the Maintenance and Improvement of hh-suite - github.com/soedinglab/hh-suite

- Remodeled the parallelization with OpenMP and OpenMPI
- Overhauled the build pipeline with cmake
- Published the project on GitHub

Work Experience

Max-Planck Institute for Biophysical Chemistry – Goettingen, Germany   January 2017 – Present

- Postdoc Researcher in Computational Biology
- Built PEnG Motif and coordinated other projects from my Ph.D.

Max-Planck Institute for Biophysical Chemistry – Goettingen, Germany   July 2014 – December 2016
Group of Dr. Johannes Soeding

- Scientific Assistant, Ph.D. student
- Supervised master students

Gene Center at the Ludwig Maximilians University – Munich, Germany   July 2012 – June 2014
Group of Dr. Johannes Soeding

- Scientific Assistant, Ph.D. student
- Supervised bachelor students

Education

Ludwig Maximilians University – Munich, Germany   2016
Ph.D.   **Grade 1.0**   **Bioinformatics**

Ludwig Maximilians University and Technical University – Munich, Germany   2012
Master of Science   **Grade 1.2**   **Bioinformatics**

Ludwig Maximilians University and Technical University – Munich, Germany   2011
Bachelor of Science   **Grade 2.0**   **Bioinformatics**

Certificates

Udacity – Front-End Web Developer Nanodegree	In progress
Coursera – Beginning Game Programming in C#	April 2017
Coursera – Charting & Data Representation in Python by University of Michigan	March 2017
Coursera – Plotting, Introduction to Data Science in Python by University of Michigan	December 2016