Sebastian Heucke

Molecular Biologist

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Skills

- Advanced knowledge in molecular biology and genetics through my studies at university.
- Bioinformatics and NGS Knowledge from work experience and courses.
- Programming skills in Bash and Python
- Experience with statistical software package R
- Tools for reproducible research: Git, Conda, Snakemake, Jupyter, Colab and R Markdown, Docker
- Data science and machine learning: Pandas, Numpy, Matplotlib, Sklearn, through worked on projects
- Building Web applications: Django, Html, Css, Heroku for easier availability and usage of results.
- Cloud Computing at deNBI Cloud, Openstack
- Instructor of internal SOP's

Experience of last 6 years

Institute of Pathology / Scientist

2015 - PRESENT, LMU Munich

2018-2020

- de.NBI Cloud Project dockerizing RNASeq Pipeline with WMS Snakemake
- Development of small Web Applications with Python using Web Framework Django, Html, Css and Plotly
- Building up Machine Learning Knowledge
- Data science projects on clinical data
- Establishment of RNASeq: wet lab and setting up a pipeline using bash scripts, python and R
- Data analysis of RNASeq using Galaxy workflows
- RNASeq analysis using R in Jupyter notebooks
- Instructor for RNA Sequencing and Galaxy Server
- Supervision Linux Server infrastructure

2016-2018

- Establishment of new NGS panels
- Illumina: NextSeq 500
- Data analysis of NGS results
- Linux/Bash Scripting
- Development of tools using python
- Maintenance of Server IT NGS Ion torrent
- Instructor NGS SOP's

2015

- Wetlab NGS on platforms Ion Torrent: Chef, PGM, S5 Prime
- Process optimization NGS Panels for diagnostic routine
- Pyrosequencing technology
- Programming of tools for automation of NGS-workflows with VBA in Excel
- Library preparation and sequencing for clinical studies

Education

TH Karlsruhe / Master Biologie

October 1996 - June 2003, Karlsruhe