Curriculum Vitae

Waldemar Reusch, Marienbader Str. 6/1, 70372 Stuttgart
+49 178 133 90 24, waldemar.reusch@googlemail.com

Skills

Core skills

Application and web development, focused on life-sciences and devoted to clean, sustainable architecture, future-proof technologies and usability, covering every lifecycle phase from application development to testing to deployment and system administration and every layer between database design and user interface.

Software, programming languages and technologies

Eclipse, Oracle DB, git, docker, VSCode, Glassfish, Maven, HTCondor, SVN, Linux, Firebird DB, Vim, Jenkins, Gitlab, Adobe Creative Suite, Firebug, Jira, Confluence

Java, JavaScript, HTML5, CSS3, PHP5, SQL, Bash, Perl, R, Matlab, Mathematica, LaTeX

JEE, REST, SOAP, Domain Driven Design, Object Oriented Design, (R)DBMS, functional programming, reactive programming, CI, devops, Scrum, Grid Engines

Spoken languages

German native proficiency
English professional working proficiency
Russian, Swedish elementary proficiency

Work Experience

Software Engineer and IT Allrounder

since March 2015

Insilico Biotechnology AG
Stuttgart, Germany

Developing enterprise grade software for the design and simulation of metabolic network models, quantitative comparison of bioprocess performance and feed media optimization.

Contribution of software engineering expertise throughout the software development lifecycle, from requirements, through design and implementation to deployment and in all layers between database, middleware, grid engine and user interface.

Maintanance and administration of IT infrastructure including multiple testing and deployment machines running CentOS and SUSE Linux, Oracle 11g database, the CI pipeline, an HTCondor compute cluster and containerized applications.

Internship

May 2013 - Jul 2013
(3 months)

Insilico Biotechnology AG
Stuttgart, Germany

Developing a genome-scale metabolic flux model of an antibiotics producing bacteria including extensive literature and database researchand modelling with proprietary software.

Research Assistant

Nov 2012 - Apr 2013

Institute of Technical Biochemistry
University of Stuttgart, Germany

Development of an User Interface for the novel enzyme sequence-structure-function database BioCatNet using PHP, HTML, CSS and JavaScript.

Research Assistant

Jan 2011 - Jun 2011

Department of Physics, Chemistry and Biology
Linköping University, Sweden

Gene Expression Analysis of the late flowering gene in the common pea *Pisum sativum*. Working with PCR/rtPCR maschienes, DNA/RNA-extraction kits and Gelelektrophoresis.

Education

Dipl. Biologe, t.o.
technically oriented Biology diploma

Oct 2007 - Nov 2014 **University of Stuttgart, Germany**
Focus: Bioinformatics, Biophysics

Jan 2011 - Jun 2011 **Linköping University, Sweden**
Focus: Neuroscience, Gene Expression

Diploma Thesis
Development of a novel Protein Database System for Sequence-Structure-Function Relationships: BioCatNet

Oct 2013 - Dec 2014 **Institute of technical Biochemistry**
University of Stuttgart, Germany

Development of a bioinformatic data warehouse application including middleware, API and UI, capable of holding and managing protein sequence, structure and function information, using PHP, Perl, HTML, CSS and JavaScript. The system is publicly available for scientific use on http://www.teed.uni-stuttgart.de

Maintanance and administration of IT infrastructure including Apache HTTP and Firebird database servers on Debian Linux machines.

Student Research Paper
Analyse thermokinetischer Potential-Strom-Kennlinien an einem Modell von *Escherichia coli*

Oct 2011 - Jun 2012 **Institute for System Dynamics**
University of Stuttgart, Germany

Assessing the predictive quality of the novel modelling technique *Thermokinetic Modelling* through automated simulations, using Mathematica, R and bash scripts on a Linux system.