**Waldemar Reusch**, Gallenklingenstr. 44, 70195 Stuttgart 0049 178 133 90 24, waldemar.reusch@googlemail.com

# **Work Experience**

#### **Software Developer**

since March 2015

Insilico Biotechnology AG Stuttgart, Germany

Developing enterprise grade software for time-resolved diagnosis and quantitative comparison of bioprocess performance using Java Enterprise Edition

### **Diploma Thesis**

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

October 2013 - December 2014 (14 months)

Institute of technical Biochemistry University of Stuttgart, Germany

Development of a database system capable to encompass protein sequence, structure and function information. Development of an Application Programming Interface and User Interface on a Debian Linux system using in PHP, Perl, HTML, CSS and JavaScript. Maintanance of Apache and Firebird servers on Debian Linux. The system is publicly available for scientific use on http://www.teed.uni-stuttgart.de

#### Internship

Reconstruction of a Metabolic Model of *Streptomyes albus* Strain J 1074

May 2013 - July 2013 (3 months)

Insilico Biotechnology AG Stuttgart, Germany

Modelling a genome-scale metabolic flux model of an antibiotics producing bacteria. Extensive literature and database research, modelling with proprietary software.

#### **Research Assistant**

November 2012 - April 2013 (6 months)

Institute of Technical Biochemistry University of Stuttgart, Germany

Development of an User Interface for the novel enzyme sequencestructure-function database BioCatNet. Development on Windows, using PHP, HTML, CSS and JavaScript as templating, markup, styling and action scripting languages, respectively.

### **Student Research Paper**

Analyse thermokinetischer Potential-Strom-Kennlinien an einem Modell von Escherichia coli

October 2011 - June 2012 (9 months)

**Institute for System Dynamics University of Stuttgart, Germany** 

Assessing the predictive quality of the novel modelling technique Thermokinetic Modelling. Programming scripts with Mathematica, R and the shell on a Linux system.

#### Research Assistant

January 2011 - June 2011 (6 months)

**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/RNAextraction kits and Gelelektrophoresis.

#### **Education**

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

October 2007 - November 2014

**University of Stuttgart** Germany

Focus: Bioinformatics, Biophysics

Activities and Memberships: Fachschaftsvertretung Technische Biologie, Technischen Biologen an der Universitä Stuttgart e.V.

**January 2011 - June 2011** 

**Linköping University** Sweden

Focus: Neuroscience, Gene Expression

Activities and Memberships: LinTek

allgemeine Hochschulreife general qualification for university entrance

2002 - 2007

Johannes-Kepler-Gymnasium Reutlingen, Germany

1998 - 2002

Martin-Andersen-Nexö Gymnasium

Dresden, Germany

### **Skills**

### Languages

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

IT

**Database design and administration, Application Development, Bioinformatics,** Metabolic Networks, Apache and Firebird servers, GIT version control, Windows and Linux administration, Microsoft and Libre Office, Adobe Creative Suite, JEE, JPA

### **Programming Languages**

PHP4/5, HTML5, JavaScript, CSS3, SQL, Java, Perl, R, Matlab, Mathematica, Bash, LaTeX

## Personal

Birthday: March 18th, 1988

Family: not married, no kids

Nationality: german

#### **Interests and Activities**

Webdesign and -development, Gadgets and emerging Technologies, Biotechnology, Analog Photography, Art and Design, Music, Movies, Electronics, Gardening