

# Professional Skills

## Software Development

- Outstanding knowledge of Java (JSDK, J2EE, JSP, Web Services) and the development tools Rational Rose, NetBeans, and Eclipse.
- Excellent knowledge of the markup languages XML and HTML.
- Sound knowledge of the scripting languages Perl, PHP, JavaScript, ColdFusion Script und shell programming.
- Longtime experience in the development of web applications, especially based on Apache, Tomcat, Java, PHP und MySQL.
- Superb knowledge of data modeling techniques using UML.

## Databases

- Installation, configuration, and administration of the databases MySQL, Oracle, IBM DB2, Lucene, and Xindice.
- Basic knowledge of Oracle's PL/SQL.
- Development of applications on top of the mentioned databases.
- Modeling of relational, object-oriented, and hierarchical database structures.
- Relational database management with SQL.
- Building full-text search mechanisms with Oracle, MySQL, IBM DB2, and Lucene databases.

## Operating Systems

Sound knowledge of installation, configuration, and use of the following operating systems.

- Windows 9.x, NT, 2000, XP
- Unix
- Linux

## **Special skills**

- Knowledge of culture-specific adaption and customization of information services and project management.
- Development and administration of content-management-systems, especially with Mambo Open Source.
- Experience in 3D-graphics development and computer animation with 3D Studio Max.
- Experience with information retrieval research and experiments concerning the TREC and CLEF tasks.
- Main developer of the RECOIN software, a platform to integrate heterogenous retrieval components to conduct retrieval experiments.
- Knowledge of machine learning and AI techniques.
- Understanding of UI design for document retrieval incorporating graphic design and usability issues.
- Basic knowledge of data mining and OLAP procedures.
- Knowledge of distributed and concurrent programming techniques and clusters.

## **Languages**

- Business fluent German and English.
- Spoken and written Spanish and Portuguese.
- Basic knowledge of French and Italian.