Birthdate	06.10.1985
Xing	https://bit.ly/3lvgnTw
LinkedIn	https://bit.ly/34zNFK4
Twitter	https://bit.ly/erichx3
Github	https://bit.ly/34h68w3

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EXPERIENCE

02/2018 - heute

23 degrees GmbH
Data Scientist and Senior Developer

Architecture and test-driven **development of a platform** for the manual and automated creation of **data visualizations**. Visualizations can be embedded into websites. The platform processes more than 100 million requests for more than a million people per day. Furthermore, thousands of data sets are programmatically extracted from free statistics portals, transformed and loaded into the platform. From this, visualizations are automatically updated or newly created.
Design and implementation of **ETL processes, data models, databases and data governance structures** and **data validation systems**.
Development of a tagging system with integrated speech recognition, **named entity recognition, topic classification** and geographic classification.
Development of a **semantic search**.
Organization and execution of code reviews.
Python, *JavaScript*, *TypeScript*, *ElasticSearch*, *Tensorflow*, *Docker*, *Kubernetes*, *Google Cloud, AWS, MongoDB, Angular, scikit-learn, Transformers, git, Jira*

01/2017 - 01/2018

Capol AG
Software Developer

Architecture and development of a CRM solution with included cash register software.
Design and development of an **Android app** for carrying out inventories.
C#, Java, JavaScript, SQL, MVVM, MySql, MongoDB, Angular, git, Jira

01/2016 - 12/2017

Thrive GmbH
CTO and Founder

Architecture and development of a web-based **data science platform.**
Tutorial Video: https://bit.ly/2Th32ls
Jupyter Notebooks, JavaScript, Python, MongoDB, Meteor, AWS, Docker, git, Jira, CI/CD, Monitoring

12/2013 - 12/2015

Institute for Advanced Studies (IHS)
Senior Expert and Head of Data Center

Establishment and **management of a data center** for data preparation, data documentation and data provision.
Infrastructure development and dissemination activities.
Design and implementation of data-based scientific commissioned studies for ministries and other stakeholders in the public sector.
Statistical modeling and **exploratory data analysis** - regression models and clustering methods.
Python, SQL, PostgreSQL, Apache Hadoop, Hive, scikit-learn

01/2011 - 11/2013	**Institute for Advanced Studies (IHS)** **Research Assistant - Department Economics and Finance**

Design and implementation of **data-based scientific commissioned studies** for ministries and other stakeholders in the public sector.
Lectures at conferences and presentations.
Exploratory data analysis.
Python, SQL, SPSS, D3.js, SQL, PostgreSQL, SciPy, Excel VBA

EDUCATION

2016 - heute	**Vienna University of Technology** **Doctor of Computer Science (atm on leave)**

Proposal: "Towards Artificial Intelligence for Automatic
Programming in the Domain of Research Programming" https://bit.ly/34fi8hM.

2009 - 2011	**Vienna University of Technology** **Diplomingenieur – Information and Knowledge Management**

Thesis: "Wissenserwerb und Data Mining anhand von österreichischen Sozialversicherungsdaten am Beispiel des touristischen Arbeitsmarktes" https://bit.ly/31uDQws.

1998 - 2010	**Vienna University of Technology** **Bachelor of Science - Media Informatics**

Bachelor thesis: "Dominoday in einer VR Umgebung" https://bit.ly/3jkRR5O.

1996 - 2004	**BORG Hartberg & Sacré Coeur Pressbaum** **Focus IT**

PET PROJECTS

Reboting https://bit.ly/35l8vNJ - Playground. Recommender engine that learns continuously through user ratings and constantly presents users with new content from Reddit and other data sources.
Ionic, Tensorflow Serving, ML models für text and Image similarity

ThrivePlus https://bit.ly/2TbIVFv - Algorithm for the ongoing analysis of information points during a soccer game to calculate the chances of victory. Linear regression model and data preparation. **First place - ORF Challenge - Rapid Hackathons 2018.**

PUBLICATIONS

Heil E., Neumaier S. (2018) reboting.com: **Towards Geo-search and Visualization of Austrian Open Data**. In: Gangemi A. et al. (eds) The Semantic Web: ESWC 2018 Satellite Events. ESWC 2018. Lecture Notes in Computer Science, vol 11155. Springer, Cham. https://bit.ly/35kpkIT

Heil, E., & Walch, D. (2015). **Analysis and visualization of Austria's social insurance system**. SEMANTiCS (Posters and Demos). https://bit.ly/37zvuHT

Hanappi, Tibor; Müllbacher, Sandra and Heil, Erich (2014) **Auswirkungen von finanziellen Anreizen auf das Pensionsantrittsalter. Eine Analyse mit dem Mikrosimulationsmodell IREA** ; Endbericht ; Studie im Auftrag des Bundesministeriums für Finanzen. [Research Report] 73 p. https://bit.ly/2FSaSz4

Complete list: https://bit.ly/2FU3Wl2

LANGUAGES

German: native language
English: business fluent