



# Patrick Michl

Senior Data Scientist | AI Engineer | Mathematician



## PERSONAL

**Contact** Floringasse 5, 69117 Heidelberg, DE  
Phone: +49 177 85 44 151  
Email: [patrick.michl@gmail.com](mailto:patrick.michl@gmail.com)

**Legal** POB/Date-: 93309 Kelheim, DE at 05/19/1982  
Nationality: German  
Marital status: Married

**Online** Professional profile: [LinkedIn](#)  
Research profile: [ORCID](#) | [Heidelberg University](#)  
Software development: [GitHub](#) | [PyPI](#)  
Blog/Talks: [Frootlab](#) | [SlideShare](#)  
Certificates: [Credly](#) | [Coursera](#) | [Scrum.org](#)



## ABOUT

*I spent the most part of my professional and educational lifetime by shaping my experience and expertise in AI, machine learning, software development and network technologies. During this process I gained domain specific insights into different industries comprising manufacturing (engineering, shop floor and office), finance (office, sales) and pharma (research). I identify myself as a passionate mathematician, obsessive software developer and convinced AI enthusiast.*



## EDUCATION

### Ruprecht-Karls-University Heidelberg, 2006 - 2018

Mathematics Diploma: Grade 1.4 / GPA 3.6, with specialization in statistics, machine learning and differential geometry. Subsidiary subjects: Theoretical physics, applied computer sciences and systems biology. Fundamental [research](#) in machine learning and systems biology with honored [diploma thesis](#): "Principal Manifold based Correlation Analysis"

### Ostbayerische Technische Hochschule Regensburg, 2003 - 2006

Applied mathematics with specialization in graph theory, optimization and operations-research. Subsidiary subjects: Relational database management, software development and economics. Internship semester: Development and implementation of the graph-based optimization [algorithm and software](#) "PolyTran" for automated machine translation.



## LANGUAGES

**German:** Native | **English:** Fluent | **French:** Basic | **Irish:** Basic



## EXPERIENCE

### amprela GmbH, Senior Data Scientist Mannheim, 05/2021 - present

Process mining, enterprise data modeling and digitalization projects from inception to agile project management, implementation and operation

### reboot GmbH, Data Scientist Mannheim, 03/2020 - 04/2021

AI driven shop floor automation, business analytics, database development and digitalization projects comprising predictive analytics and RPA

### Freelance Data Scientist Heidelberg, 03/2018 - 02/2020

Consulting in enterprise data warehousing, (hybrid-, multi-) cloud, data analysis- and digitalization projects in the Rhine-Neckar metropolitan area

### Frootlab Smart Analytics, Founder Heidelberg, 05/2016 - present

Founder, software architect and consultant for the next generation low code [software framework](#) "Vivid Code" for automated collaborative computing

### Ruprecht-Karls-University

06/2008 - 02/2014, Institute for Mathematics, Systemadministrator: Unix administration, DB administration, network configuration and security

05/2012 - 07/2012, Institute for Molecular Biotechnology, Research Assistant: Deep-learning-based gene expression analysis

10/2008 - 03/2009, Institute for Computer Sciences, Lecture Assistant: Applied CS and programming at software engineering research group

### DKFZ, Research Assistant Heidelberg, 12/2012 - 01/2014

Research in deep-learning-based gene regulation analysis with application to breast cancer and GBM at the network modeling research group

### Eckert Schulen, Freelance Technical Writer Regenstauf, 10/2011 - 09/2012

Authoring of the textbook: "Netzwerktechnik", NET(TE)1, ArtNr. 02303, for the vocational education of IT- and electrical engineers in germany



## SKILLS

Machine Learning | Statistics | AI | Data Visualization and Presentation  
Statistical Programming (Python, SAS, R, Matlab) | Business Analytics  
Predictive Maintenance | Process Mining | Network Technology / Security  
DB Dev (SQL, noSQL) | Cloud Dev (Docker, Kubernetes, Azure, Spark)  
Web Dev (TypeScript, Angular, PHP; REST) | Administration (Debian)  
IT Project Management (Scrum)