

# CURRICULUM VITAE

## About

Thomas Fritsch



born 01/24/1957  
in Coburg, single

## EDUCATION

### *School education*

1963 – 1976

Primary school, secondary school and grammar school with high school diploma in Neustadt near Coburg

### *University education*

1976 – 1979

at the Bavarian Julius-Maximilians-University of Würzburg

1979 – 1984

**Studies** of physics and economics

1982 – 1984

**Study** of Slavic Studies

1984 – 1989

**Double degree** in Mathematics/Slavic Studies

03/26/1990

**Studies** of Mathematics/Computer Science

May 1990 – Dec. 1994

**Academic degree** “Diplom-Mathematiker Univ.”

02/15/1995

**Doctorate** in Computer Science at the Chair of Distributed Systems (*i3*)

07/25/1995

Doctoral examination (Prof. Tran-Gia, Würzburg, Prof. Kühn, Stuttgart)

**Academic degree** “Dr. rer. nat.” (PhD), Grade “very good”

## PROFESSIONAL CAREER

1982 – 1990

**Self-employed activity** in education and training, consulting and programming in Würzburg and the surrounding area, Munich, Heidelberg and Hof with focus on C-programming, CAD-CAM and networks e.g. for the bfz - Berufliche Fortbildungszentren der Bayerischen Arbeitgeberverbände e. V., the IHK Würzburg and for Meteosat Software GmbH & Co. KG, Munich and Heidelberg

1990 – 1994

**Research associate** at the Chair of Computer Science III at the University of Würzburg with focus on Neural Networks in Telecommunications as well as interdisciplinary projects for the application of Neural Networks in

- planning of mobile communication and traffic systems (PhD thesis)
- the analysis of Parkinson's disease patient data (Neurological Institute of the Ruhr-Universität Bochum)
- time series analysis of biological data (Physical Institute of the University of Würzburg)
- the project cooperation with IBM (Böblingen), Daimler-Benz (Esslingen) and atg test systems GmbH, Wertheim-Reicholzheim, Germany
- supervision of 5 diploma theses as well as 15 student research projects and projects

## ENTREPRENEURIAL CAREER

- 01/1993 – 02/1996 **Freelancer** at **Nimbus GmbH** (Naturwissenschaftliches Institut für Medizin, Biologie und Studien), Hammelburg with focus on data analysis and data mining of medical data with neural networks
- 03/1995 – 02/1996 **Freelance IT lecturer** at the bfz Würzburg and Munich in advanced training courses for graduates offered by the employment office
- WS 96/97 – SS 99 **Adjunct Professor** in Mathematics at University of Applied Sciences Würzburg-Schweinfurt-Aschaffenburg
- 03/1996 – 10/1999 **Entrepreneurial activity** in the field of medical image and signal processing
- Establishment and management of the international scientific project group “3D real-time polychrome sonography” (Würzburg, Warsaw, Gliwice)
  - Electronic development for raw data acquisition and analysis of medical ultrasound devices for the Institute of Environmental Medicine at the Canadian Ministry of Defense (DCIEM, Toronto)
  - Development contract for the application of neural networks and acousto-optical methods for medical ultrasound imaging by ROI AG, Martinsried, Germany
- 11/1999 – 10/2004 **Entrepreneurial activity** in the field of IT consulting, in particular business intelligence, data mining, content and knowledge management (e. g. for **Cocomore AG**, Frankfurt a. Main) and IT technology for laboratory medicine (for **Lab’Partners GmbH**, Augsburg). Realization of several facility management contracts with major German insurers (**DKV - ERGO Insurance Group**).
- 11/2004 – 10/2005 **Science marketing** for **A. Eberle GmbH & Co. KG** to the CPR-D. (now GDASys) to avoid blackouts in the power grid.
- 11/2005 – 05/2006 **Development work** for **Sick Engineering GmbH** – Ultrasonic signal processing for flare gas measurement in gas pipelines.
- 06/2006 – 07/2009 Until 10/2008 **Development work** for **A. Eberle GmbH & Co. KG**. From 01/2008 to 07/2009 own **research work** for oil parameter analysis with multi-frequency ultrasound and intelligent data analysis.
- 08/2009 – 04/2017 Founder and CEO of **Yucoya Energy Safety GmbH** with corporate purpose: Development, production and sales of electronic measuring instruments for transformer oil analysis by means of multi-frequency ultrasound. Development work for the **A. Eberle GmbH & Co. KG**.
- 05/2015 – now Consulting activities within the context of **BRAIN<sup>2</sup> Soft Computing & Consulting** in the field of neural networks, artificial intelligence, energy technology, transformer oil diagnostics, data science, e.g. for international consulting companies such as Gerson Lehrman Group (GLG).
- 06/2017 – now Founder and CEO of **Tokeya Deep Data Dive GmbH & Co. KG** with corporate purpose: Software development in the area of Artificial Intelligence (Deep Learning, Time Series Analysis) in connection with Industrie 4.0 and the Industrial Internet of Things (IIoT) in the form of services, software development and consulting, see offer Tokeya on the homepage [www.Tokeya.de](http://www.Tokeya.de)

## PRIVATE ENGAGEMENT

October 12–18, 1995	<b>Co-organizer</b> of the “Interdisciplinary Autumn School and Workshop on Neural Networks: Application, Biology and Theory” in Würzburg
July 26–27, 1997	<b>Organizer of the</b> “1st SoNNdays – Sommerhausen Neural Net days”
Since January 1999	<b>Member</b> of the DEGUM (Deutsche Ges. f. Ultraschall in d. Medizin)
Since June 2002	<b>Member</b> of the network NOSE-II (electronic nose)
Since 2011	<b>Member</b> of the IEEE (Institute of Electrical and Electronical Engineers)

## PRESENTATION & EDUCATION

1990 – 2017	Attendance of <i>international congresses, symposia and conferences</i> in Germany, France, Belgium, Austria, Poland, Spain, England, Singapore, Switzerland, the Czech Republic, Italy, India, China and the USA.
2000 – 2003	<b>Private education:</b> Bioinformatics, Image Processing, Publishing, AI
2004 – now	<b>ditto</b> in energy technology, sensors, chemistry, signal processing, intelligent data analysis and statistics, deep learning, data science, advanced neural networks, modern AI

## LANGUAGE SKILLS

German, English	Fluently spoken and written
French, Russian	Good reading skills, moderate speaking skills