#### Edouard Fouché, PhD, MBA



Date of birth: 29.11.1992 Nationality: French, German Blog: edouardfouche.com Publication list: Google Scholar

#### **CONTACT**

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#### **EXPERTISE**

Data Science
Machine Learning
Artificial Intelligence

Algorithms, Programming Visualization, Databases

#### **PROGRAMMING**

Python (~10 years) Scala (~5 years) SQL (~5 years) R (~3 years)

#### **SOFTWARE**

Git, Linux, MacOS, Databases, LaTeX, Adobe, MS Office

## **SOFT SKILLS**

Research, Teaching Leadership

Stakeholder Management Agile Development Cultural Awareness Dedication, Communication

#### **LANGUAGES**

French (Native)
English, German (Fluent)

#### **INTERESTS**

Photography (> 12 years) Hiking, Travels, Cooking, Roller Derby, Fitness

# **Award-Winning Machine Learning Researcher Revolutionizing Energy Infrastructures**

# EXPERIENCE

## 2023-now Data Scientist for Product Innovation, Siemens AG.

- o Building data pipelines for AI-powered forecasting at scale.
- o Benchmarking and MLOps improving predictions by up to 300%.
- o Managing stakeholders at corporate level and consulting on data strategy. Tech stack: Jira, Confluence, GitLab CI/CD, Docker, Python, Sklearn, Pytorch, ML-Flow, Kubernetes, Azure, AWS S3, AWS EC2, PostgresSQL

## 2020-2023 Group Leader & Lecturer, Karlsruhe Institute of Technology (KIT).

- Co-supervision of 4+ doctoral students, and many master students.
- o Principal lecturer for Data Science. Best elective two years in a row.
- o 6-month research visit in the group of Prof. Junya Honda, Kyoto University.

# 2016-2020 Researcher & Ph.D. Candidate in Data Science, KIT.

- o Advised 10+ student theses (Master/Bachelor level).
- $\circ$  Collaborated with 2 research labs (international) and 5 industry partners.
- o 3-month research visit at the Data Mining Group, Prof. Jiawei Han, UIUC.

# 2015-2016 Software Developer (part-time/intern), IBM R&D GmbH, Böblingen.

- o Created ibmdbpy, an open-source interface between Python and DB2.
- Writing my Master's thesis in collaboration between KIT and IBM.
- o Co-supervision of fellow interns and giving Python coaching.

# **EDUCATION**

### 2020-2021 MBA, Quantic School of Business and Technology. (fka "Smartly")

- $\circ$  Online, 7% admission rate. Graduated with honors (top 10% of cohort).
- o Accounting, Economics, Data & Decisions, Leading Organizations, Marketing, Finance, Supply Chain & Operations, Strategy, Entrepreneurship.

# 2016-2020 Ph.D. (Dr.-Ing.) in Data Science, KIT.

- $\circ$  Thesis: Estimating Dependency, Monitoring and Knowledge Discovery in High-Dimensional Data Streams. (Advisor: Prof. Klemens Böhm)
- o Summa Cum Laude (top 10%). Helmholtz Doctoral Prize. German GPA: 1.0

# 2015-2016 M.Sc. Computer Science, KIT.

- o Thesis: Fast In-Database Feature Selection. (Advisor: Prof. Emmanuel Müller)
- o German GPA: 1.4 (Very Good)

#### 2010-2015 Diplôme d'Ingénieur (Dipl.-Ing.), ESIEE Paris, France.

- o Major: Computer Science. Final internship at IBM R&D (6 months).
- o "Félicitations du Jury" and "Parcours d'Excellence" award.

## Awards

- 2024 Best Elective Lectures: Data Science 1 & Data Science 2.
  - KIT Faculty of Computer Science two times in a row.
- **Leadership Academy Fellow (German Scholars Organization).**10K€ grant for leadership training, networking, mentoring.
- 2021 Elite Program for Postdocs (Baden-Württemberg Stiftung).
  Research funding of 150K€ and trainings for early career researchers.
- **Doctoral Prize (Helmholtz Association).** 5K€ + 12K€ travel scholarship The Helmholtz Association is the largest german scientific organisation.
- 2019 Best Paper Award (SSDBM: Statistical and Scientific Database Management).
  Paper: Monte Carlo Dependency Estimation.
- **Software Campus Fellow (Federal Ministry of Education and Research).** 100K€ research grant, training, mentoring.
- **2015 Parcours d'Excellence (ESIEE Paris).** Top 1% of the cohort.