

## CV

### Dr.-Ing. John Erik Wittern

#### Industrial experience

**IBM T.J. Watson Research Center**, Yorktown Heights, NY, USA

Oct. 1<sup>st</sup> 2014 – today

*Research Staff Member and Technical Lead (full-time)*

*IBM Research is the world's largest and most established industrial research organization, and the innovation engine of IBM. Research Staff Members drive this innovation through technical and scientific work.*

Leader of research projects and teams in Cloud Computing and Software Engineering with a focus on Web APIs; over 20 patents for IBM; functional supervision of one employee and multiple research interns (PhD students).

Initiating and leading the development of tools for migrating to GraphQL APIs, and for managing such APIs operationally. Technical representative of IBM in the GraphQL Foundation.

Conceptualization, implementation, and operation of API Harmony, an API catalog in the IBM Cloud.

**FZI Research Center for Information Technology**, Berlin

Aug. 1<sup>st</sup> 2012 – July 31<sup>st</sup> 2014

*Research Scientist (full-time)*

Research and teaching in Cloud Computing and Software Engineering.

Representation of research group in EU multi-partner/industry-research consortium, participation in other research projects, and contribution to research proposals.

Supervision of master and bachelor theses; running seminars; preparing lectures.

**IBM T.J. Watson Research Center**, Yorktown Heights, NY, USA

June 3<sup>rd</sup> – Aug. 31<sup>st</sup> 2013

*Research intern (full-time)*

Research on “Scalable Service Ecosystems“, resulting in scientific paper and 4 patents.

**Deutsche Bank AG**, Frankfurt am Main

April 6<sup>th</sup> – July 3<sup>rd</sup> 2009

*Intern in Inhouse Consulting (full-time)*

Working on group-strategic projects “Marketing & Communication and Realignment of Business Management“ and “Global Banking Know Your Customer“.

**IBM Deutschland GmbH**, Düsseldorf

March 17<sup>th</sup> – July 16<sup>th</sup> 2008

*Intern in Global Business Services (full-time)*

Development of technical tests for RFID system; conceptualization of an dynamic Content Management System.

#### Education

**Karlsruhe Institute of Technology (KIT)**, Karlsruhe

**PhD** (Dr.-Ing.; completed with magna cum laude)

1. Aug. 2010 – 15. Mai 2014

Topic: “Modeling and Selection of Software Service Variants” at the Institute of Applied Informatics and Formal Description Methods (AIFB) under Prof. Dr. Stefan Tai.

Representation of the University in the FP7 EU project “Citizens Collaboration and Co-Creation in Public Service Delivery (COCKPIT)”, as well as contributions to teaching.

**Studying “Wirtschaftsingenieurwesen”** (Engineering and Management)

1. Okt. 2004 – 31. Juli 2010

Focus on computer science.

Working as a research assistant from December 1<sup>st</sup> 2009 to March 31<sup>st</sup> 2010.

Diplom with grade 1.5 (“very good”)

**City University London**, London, England

Sep. 1<sup>st</sup> – Dec. 31<sup>st</sup> 2007

Study abroad program in economics, grade first (“very good”).

**Gymnasium Blankenese an der Kirschtenstraße**, Hamburg

Sep. 1<sup>st</sup> 1995 – June 31<sup>st</sup> 2004

Abitur, grade 1.3 (“very good”)

## Technical eminence

- Technical representative of IBM and founding member of the GraphQL Foundation since March 2019
- Main contributor to OASGraph open-source project (> 250 GitHub stars)
- Member of program committees of numerous international top conferences (MSR, ICWE, ICWS ICSME etc.) and of the steering committee of the ESOC conference since 2016
- Co-organizer of the 2nd Vienna Software Seminar “DevOps and Microservice APIs”, August 2019
- Co-organizer of multiple workshops (MoTA 2016; M4IoT 2017 & 2018) at the Middleware conference
- Book co-author „Cloud Service Benchmarking”, published by Springer
- Author of over 25 scientific, peer-reviewed articles in leading international conferences and journals (over 340 citations) and 20 patents
- Review of technical contributions to leading journals & national grant proposals (Canada, Israel etc.)

## Speaking

- Over 20 presentations at international technical conferences
- Talks at developer conferences (API Strategy 2018, IBM InterConnect 2018)

## Awards/Honors

- 5 IBM Innovation Plateaus – Recognition for submitting in sum 20 patents for IBM
- IBM „A Level Accomplishment” for “Research Contributions to the API Economy and SaaS Transformation”
- Distinguished Reviewer Award at the MSR Conference in 2019
- ACM SIGSOFT Distinguished Paper Award at the MSR conference 2018

## Personal development projects

- MagicOS.co – Application for managing Old School Magic collections (React.js, Google Cloud)
- numbie – Anonymous, ephemeral, real-time location sharing (Meteor, Heroku)
- GravityQuest – Retro game, in the iOS app store from 2014 to 2017 (Phaser.js)
- TechCrunch Disrupt – 3-times participant and developer in the TechCrunch Disrupt NYC Hackathon (received tickets to the main conference after evaluation of the outcome each time)

## Social engagement

- Volunteer judge at the Westchester Science & Engineering Fair (WESEF) in New York, 2015 to 2019
- President of the UNICEF student organization at KIT from July 1<sup>st</sup> 2008 to August 31<sup>st</sup> 2010

## IT skills

Programming:	TypeScript/JavaScript/Node, Python, Java, C++, Ruby, HTML, CSS
Frameworks:	React.js, Vue.js, Express, Google Firebase, Bootstrap etc.
Cloud technologies:	GraphQL, OpenAPIs, REST, Git, Docker, Kubernetes, Istio etc.

## Languages

German (native speaker), English (business fluent), French (basic knowledge)

## Hobbies

Tennis, Old School Magic, programming, reading, cooking