

BASTIAN HALECKER

YEAR 2023

# BUILDING FOUNDATIONS

A PROFESSOR'S JOURNEY IN TEACHING, RESEARCH,  
AND NETWORK PROJECTS IN DEEP TECH  
ENTREPRENEURSHIP

SECOND YEARBOOK

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DEEP TECH  
ENTREPRENEURSHIP



# INTRO TO THE SECOND YEAR

My second year at XU Exponential University focused on securing and initiating our first externally funded projects. These projects, primarily technology-based, were developed in partnership with small and medium-sized enterprises (SMEs) under the ZIM funding program. Through this work, I began building a talented and dedicated team, with whom I continue to collaborate today.

In teaching and collaboration, I continued to lead numerous hands-on projects with my students, building on the successes of the first year. A significant highlight was taking on the Entrepreneurship course at the University of Potsdam, which provided a unique opportunity to experience the differences between a state university and a practice-oriented institution like XU.

Another milestone was the successful publication of my first conference paper on Deep Tech Entrepreneurship. Thus, 2023 was marked by strengthening our internal structures and expanding our team through the ZIM projects.

A handwritten signature in blue ink, appearing to read 'B. Halecker', with a long horizontal stroke extending to the right.

**PROF. DR. BASTIAN HALECKER**

# MY GUIDING PHILOSOPHY

As a passionate entrepreneur and networker, I firmly believe that my role as a professor is to serve as the pivotal link that brings value to a wide range of stakeholders through what I call “**Connecting Intelligence.**” This philosophy is rooted in the idea that we are most successful when we unite the distinct strengths of different groups to address real-world challenges. On one side, we have the **German Mittelstand—companies** that are the backbone of the economy, each with its own niche expertise, well-honed over decades. These companies possess an in-depth understanding of their industries, from the granular day-to-day operations to the larger, more complex challenges they face in a rapidly evolving world. I see this wealth of knowledge and industry-specific awareness as an invaluable resource.

On the other side, we have the power of **digital and deep tech solutions**—tools that are transforming industries globally. My goal is to merge the practical, hands-on experience of the Mittelstand with cutting-edge technological advancements. By combining these two worlds, we can achieve a unique and precise problem-solution fit that doesn’t just address current issues but anticipates future needs. This is where my passion truly lies—**connecting the dots to foster meaningful, impactful innovation.**

However, realizing this vision requires more than just theoretical understanding; it demands an entrepreneurial mindset. I believe in pragmatically applying science-based technical solutions to real-world problems and crafting business models that are both innovative and sustainable. The essence of my philosophy is that entrepreneurship is not just about starting new ventures—it’s about fostering a mindset of continuous innovation within existing companies, ensuring that they adapt and thrive in an increasingly competitive and tech-driven world.

My approach is always **focused on action and impact.** Whether by encouraging students to engage in hands-on projects with industry partners or by guiding startups through the early stages of development, I strive to create environments where ideas are not just discussed but realized. Innovation, after all, is not an abstract concept; it’s a process of trial, error, and eventual breakthrough, and it requires collaboration across disciplines and industries.

Ultimately, my vision extends beyond individual companies or sectors. If we can successfully expand this model of **entrepreneurial technology transfer across Germany**, integrating the strengths of the Mittelstand with the transformative power of technology, we have the potential to secure the future of the German economy. More importantly, we have the chance to create solutions that can have a positive impact on society as a whole, making not just companies more resilient and successful but also contributing to a better, more innovative world.

In everything I do—whether in the classroom, the boardroom, or at the drawing board—I am guided by this principle of “Connecting Intelligence.” It’s about bringing together people, ideas, and technologies to create something greater than the sum of its parts. That’s my philosophy, and it’s what drives me every day.

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# OUTLINE

**DEEP TECH ENTREPRENEURSHIP**

**TEACHING AND LECTURES**

**UNIVERSITY LIFE**

**RESEARCH**

**NETWORK AND CONNECTION**

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# COLLABORATORS ON THE DEEP TECH JOURNEY



**Prof. Dr. Bastian Halecker**  
Connector & Entrepreneur,  
specializing in Deep Tech  
Entrepreneurship



**Robert Henker**  
Researcher, Founder &  
Speaker passionate about  
Digital Assets



**Dr. Benjamin Hagedorn**  
CEO at 3D Content Logistics  
as well as Sialogic



**Max Reimann**  
Ph.D. Candidate in Image  
Synthesis @ Hasso-Plattner-  
Institute



**Andre Holdschick**  
Active in the areas of  
Investmentmanagement and  
Data Science



**Marie Domschke**  
Student at University of  
Potsdam, MScE2 at HHL

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# TEACHING & LECTURES

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# TEACHING OVERVIEW

Course	Kind of Lecture	Bachelor/Master
Unternehmensgründung	Lecture	Bachelor University of Potsdam
Organization	Lecture/Seminar	Bachelor XU (Business & Tech)
Digital Transformation	Lecture/Seminar	Bachelor XU (Business & Tech)
Digital Transformation	Project	Master XU (Business)
Blockchain & FinTech	Co-Lecture/Seminar	Master XU (Tech)

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# UNIVERSITY LIFE

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SuSe 2023

# COURSE "ENTREPRENEURSHIP" AT UNIVERSITY OF POTSDAM

DIVERSE BACHELOR'S DEGREE PROGRAMMES- UNIVERSITY OF POTSDAM

At the summer semester, Bastian replaced Prof. Julia Brennecke's course 'Entrepreneurship' at the University of Potsdam. As a visiting professor, he taught the entire course himself. There were many differences compared to teaching at XU, such as teaching in front of more than 150 students in a lecture hall as opposed to an average of 20 students in an intimate classroom. There were also different expectations from the students that had to be met, as some were very motivated and interested, while others were just taking the course for the credit points.



SuSe 2023

YEAR 2023

# COURSE "ENTREPRENEURSHIP" AT UNIVERSITY OF POTSDAM

DIVERS BACHELOR'S DEGREES - UNIVERSITY OF POTSDAM

To give the students a practical insight into start-up activities, Bastian invited various founders to the lectures to report on their findings. Robert Henker was also one of the guests.



In addition, there was a field trip to the Berlin office of KPMG, where the students had also the chance to listen to a presentation about legal factors during the founding of a company.



SuSe 2023

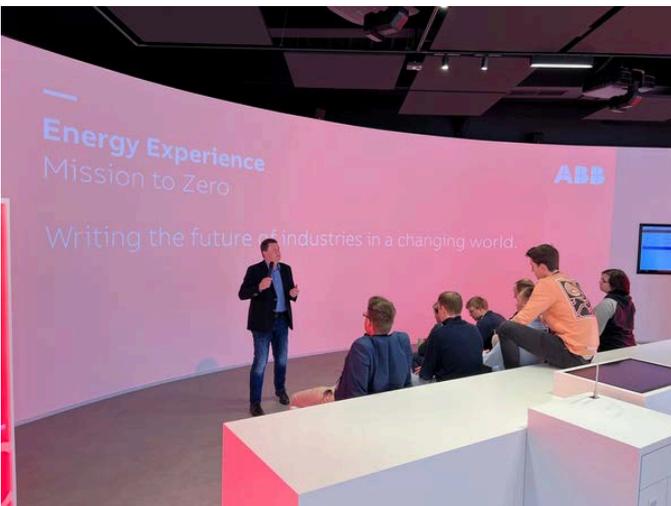
YEAR 2023

# INVITATION FROM BUSCH-JAEGER ELEKTRO GMBH

DIVERSE BACHELOR'S DEGREE PROGRAMMES - LÜDENSCHIED



Busch-Jaeger invited three of our project groups to their company in Lüdenschied. In addition to a tour of the company, there was a workshop and dinner together. A great partner that enables and appreciates many synergies between students and companies.



## BUSCH-JAEGER

BUSCH-JAEGER ELEKTRO GMBH IS A MANUFACTURER OF ELECTRICAL INSTALLATION TECHNOLOGY AND IS PART OF THE ABB GROUP. THE COMPANY WAS FOUNDED IN 1879 IN LÜDENSCHIED AND TODAY EMPLOYS 1800 PEOPLE.



SuSe 2023

## VISITING HELLA AGLAIA

DIVERSE BACHELOR'S DEGREE PROGRAMMES - BERLIN

### HELLA AGLAIA MOBILE VISION GMBH

BY DEVELOPING RELIABLE SOLUTIONS AND HIGH-PERFORMANCE PRODUCTS, HELLA AGLAIA AIMS TO HELP INCREASE EFFICIENCY AND PROFITABILITY IN THE AUTOMOTIVE, PEOPLE COUNTING, SMART BUILDINGS AND INDUSTRY 4.0 SECTORS.



With the IM2 course Bastian visited Hella Aglaia, who helped the students with their project work and gave us important advice. For a few more insights [click here](#) for the after movie.

# EXKURSION TO THE FOOD HARBOUR HAMBURG

## DIVERSE MASTER'S DEGREE PROGRAMMES- HAMBURG

Together with a group of Master's students, Bastian visited the Food Harbour in Hamburg to gain an insight into the world of food start-ups. They also visited the company Bösch Boden Spies GmbH & Co. KG, a B2B food supplier, which provided further insights and rounded off the visit



### BÖSCH BODEN SPIES GMBH & CO. KG

THE COMPANY IS A SPECIALTY SUPPLIER FOCUSED ON THE IMPORT AND DISTRIBUTION OF HIGH-QUALITY, NATURAL INGREDIENTS SUCH AS FRUITS, NUTS, AND VEGETABLES. THEY COLLABORATE WITH GLOBAL PRODUCERS TO DELIVER INNOVATIVE SOLUTIONS FOR THE FOOD INDUSTRY,



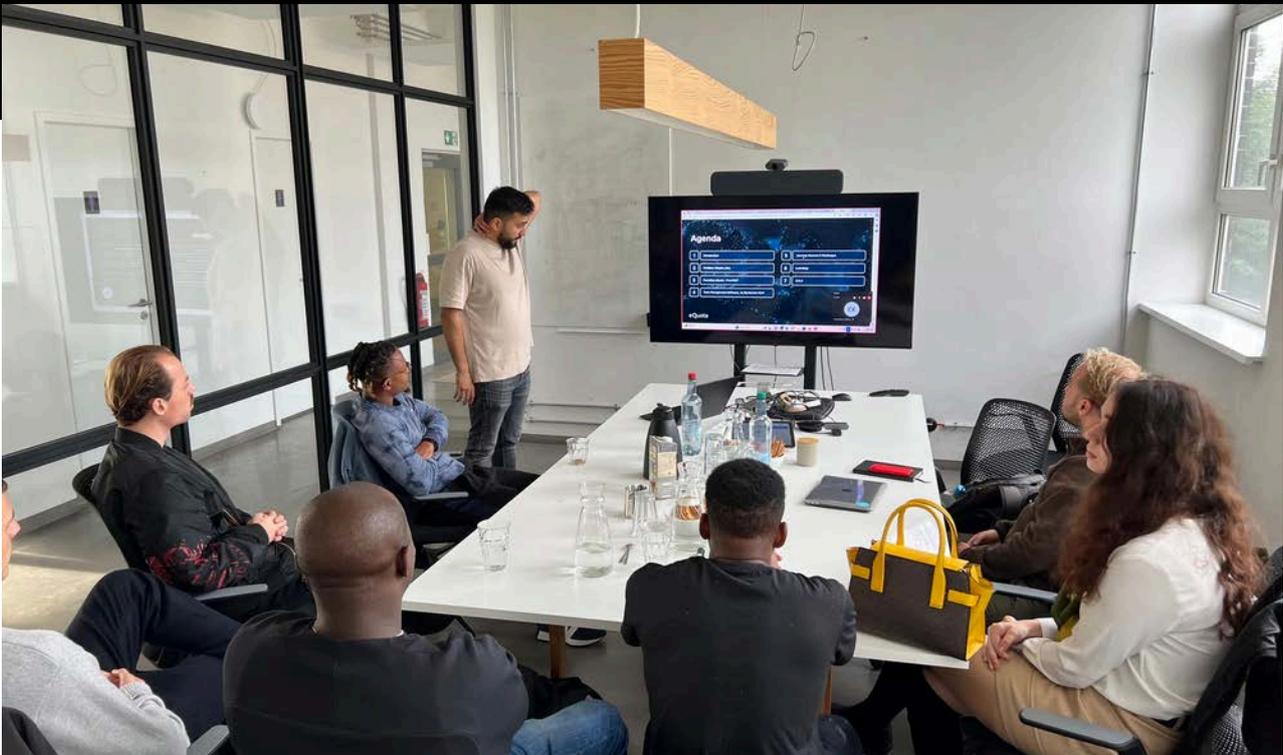
# EXCURSION TO THE BERLINER IMPACT HUB

DIVERSE BACHELOR'S DEGREE PROGRAMMES -  
BERLIN

## BERLIN IMPACT HUB

THE BERLINER IMPACT HUB IS AN IMPACT COMMUNITY, A SUSTAINABLE COWORKING AND EVENT SPACE THAT YOU CAN VISIT, A HUB FOR MISSION-ORIENTATED OFFICES AND A STARTUP INCUBATOR. THEY SUPPORT ENTREPRENEURS AND THEIR PARTNERS TO CREATE PRODUCTS AND SERVICES THAT MAKE THE WORLD A BETTER PLACE.





WiSe 2023/24

# FIELD TRIP TO EQUOTA

M. SC. DTM - BERLIN

## EQUOTA

EQUOTA IS A DIGITAL START-UP BASED IN BERLIN. THEY MARKET CO2 SAVINGS FOR OUR CUSTOMERS WITHIN THE FRAMEWORK OF THE LEGALLY PRESCRIBED GREENHOUSE GAS REDUCTION QUOTA (GHG QUOTA). THE COMPANY'S INSOLVENCY PROCEEDINGS WERE OPENED IN AUGUST 2023.



Excursion and theoretical input away from home with Master's students. Meeting with Karim from EQuota and exchange during lunch in Kreuzberg.

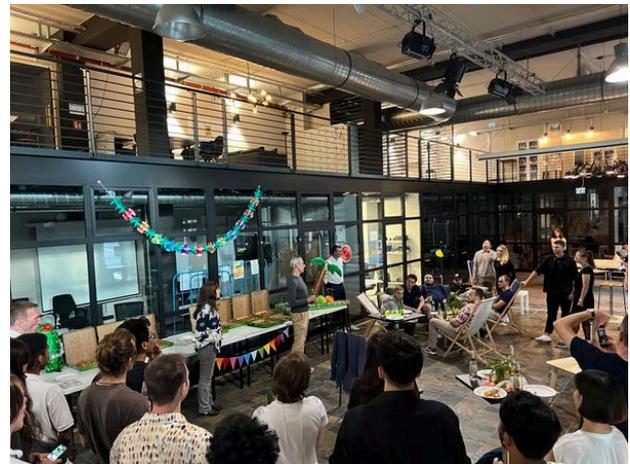
# PROJECT PITCH AT BERLINER VOLKSBANK



Student Maximilian Dietel was given the opportunity to pitch a project to Berliner Volksbank in his second bachelor's semester. Congratulations on this achievement!

## FUN AT CAMPUS

In 2023, a number of events with and for students took place at XU. Bastian appreciated the opportunity to talk to the students in a relaxed atmosphere to find out more about their goals and visions.



## LEARNING GAMES



This photo shows project work in the seminar room. Practical games, such as the game of rice on the chessboard, for a better understanding of exponentiality were explained.

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# RESEARCH

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# IMMOTOKEN

**Duration: 01.04.2023 - 30.09.2024**

The research project "Software technology for creating and managing the tokenisation of property and asset rights to real estate" (acronym: ImmoToken) has been carried out since 2023 as a cooperation project in two separate sub-projects by the two partners XU Exponential University Potsdam and German Deep Tech GmbH Potsdam. The academic managers from XU are Prof Dr Bastian Halecker and Robert Henker. Immotoken is funded as part of the nationwide, technology- and industry-open funding programme Central Innovation Programme for SMEs (ZIM) of the Federal Ministry of Economics and Climate Protection (BMWK).

The R&D project develops and researches a software technology in which tokenisations of property and asset rights to real estate are created and managed in the form of regulated, electronic securities (security tokens). To this end, regulated securities are mapped in digital twins that combine the advantages of regulated traditional securities (e.g. legal certainty, value stability and international standardisation) with those of digital currencies (e.g. liquidity, direct exchange, low costs and high security). Users are the various stakeholders in the real estate sector who create, market and manage tokenisations. The transparent, interactive visualisation of information is a key unique selling point of the research.

**Website:** <https://www.immotoken.org/>

## Research

Conference paper: Henker et al., Real Estate Tokenization in Germany: Market Analysis and Concept of a Regulatory and Technical Solution, IEEE International Conference on Blockchain and Cryptocurrency, 2023,

Bachelor Thesis: Kaya, Dilem: Unlocking the Real Estate Value: Bridging the Gap between Issuers and Investors through Security Token Offerings and Tokenization

Bachelor Thesis (upcoming 2024): Domschke, Marie: Umsetzung von Immobilientokenisierung in Deutschland (working title)



**Prof. Dr. Bastian Halecker**  
(Supervising Professor XU)



**Robert Henker**  
(Research Manager XU)



**Mathias Höhne**  
Project Partner (GDT)



**Marie Domschke**  
(Project Manager XU)

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YEAR 2023

# FROM BUILDING BLOCK TO APPLICATION

## Conference Paper

**Abstract:** Deep Tech has already attracted a considerable amount of attention from the public sector and venture capitalists, with academia also demonstrating a rising interest in the concept. Scholarly literature has widely discussed the general challenges associated with the commercialization of Deep Technologies. However, there is a dearth of new practical solutions and only a few researchers have addressed the difficulties encountered in the technology transfer of Deep Tech. This paper seeks to explore the pertinent issue of innovation management in regards to the persistent difficulties experienced in the technology commercialization process, while drawing on the unique characteristics of Deep Tech. The fundamental premise of our framework is the new perspective on Deep Tech as a core technology respectively a main technology layer - we call it Building Block, which is capable of providing the basis for numerous multidisciplinary applications. With this approach, the commercialization of Deep Tech can be advanced.



**Prof. Dr. Bastian Halecker**  
(Corresponding author)



**Marius Dotzel**  
Doctoral Student

## Reference

This paper was presented at the XXXIV ISPIM Innovation Conference, held in Ljubljana, Slovenia on 04 June to 07 June 2023. ISBN 978-952-65069-3-7.

[Click here](#) for the full paper.

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YEAR 2023

# NETWORK AND CONNECTION

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YEAR 2023

# NETWORK AND CONNECTION



Dinner with various personalities in a beautiful villa in Potsdam



Bastian's wife Paola has published her first book: “Das große Buch der Zukunftskids” (“the big book for kids of the future”)

# NETWORK AND EXCHANGE



Boat trip with various startups from and in Potsdam. Christian (XU student) and Robert (XU) are also on board.



Joint dinner with tech talents from XU.



Bastian as a juror at the KPMG Pitch Event.



Bastian has once again been invited to the annual Deep Tech Award. Berlin's Senator for Economic Affairs Franziska Giffey had also been attending the event.



## NETWORK AND EXCHANGE

NOMINATION AND AWARD OF THE TOP100 HEADS OF THE BERLIN ECONOMY, BASTIAN IS ONE OF THEM. [CLICK HERE](#) FOR THE FULL ARTICLE.

### “24. Bastian Halecker, Exponential University of Applied Sciences

Unternehmertum und Technologie, davon ist Bastian Halecker überzeugt, bieten die Lösungen für die zentralen Probleme der Menschheit. Seit Anfang 2022 hat Halecker den Lehrstuhl für Deep Tech Entrepreneurship an der Potsdamer Privathochschule XU Exponential University of Applied Sciences inne. Gleichzeitig bringt er als Unternehmer und Netzwerker etablierte Mittelständler mit Akteurinnen und Akteuren der Berliner Start-up-Szene zusammen. (cmk)”

### “24. Bastian Halecker, Exponential University of Applied Sciences

Bastian Halecker is convinced: Entrepreneurship and technology offer solutions to the key problems facing humanity. Since the beginning of 2022, Halecker has held the Chair of Deep Tech Entrepreneurship at the private XU Exponential University of Applied Sciences in Potsdam. As an entrepreneur and networker, he also brings together established SMEs with players from the Berlin start-up scene.”

# IMPRESSUM

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