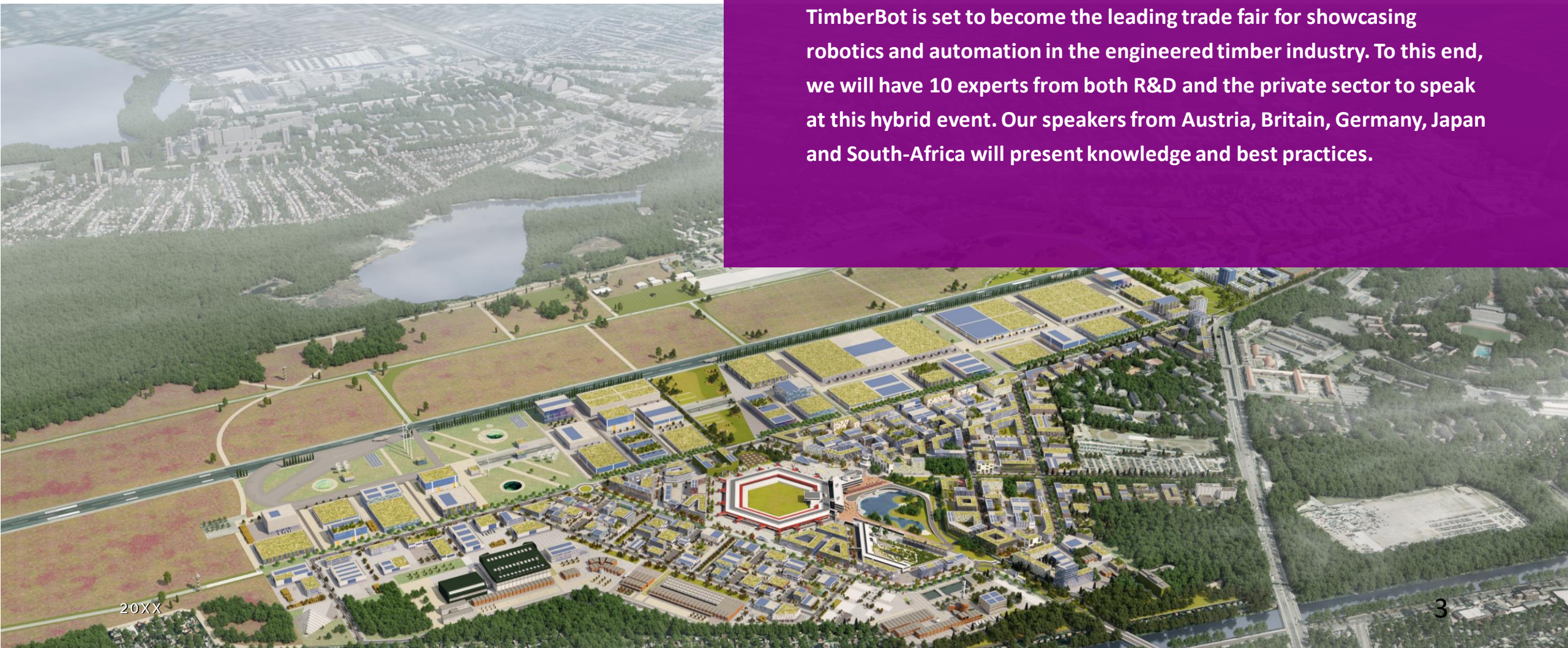
Students 120 €
Regular 580 €
14.10.2022
Berlin

TIMBERBOT


TIMBERBOT

BACKGROUND

Berlin is poised to become a timber construction center-of-excellence by 2030 and we want to promote this development. In addition to the establishment of the wood industry, 5000 timber-built apartments are to be constructed at the old Tegel Airport in the Schumacherquartier. The TimberBot is set to become the leading trade fair for showcasing robotics and automation in the engineered timber industry. To this end, we will have 10 experts from both R&D and the private sector to speak at this hybrid event. Our speakers from Austria, Britain, Germany, Japan and South-Africa will present knowledge and best practices.



TIMBERBOT

11:30 TECHNICAL CHECK

12:00 OPENING

DIPL. ING. ANDREAS LERGE

12.30 KASSEM TAHER SALEH
13:00 PROF. DR. CHRISTOPHER ROBELLER
13:30 WOLFGANG HORN
14.00 PROF. ANDREAS HEINZMANN
14:30 UPCOMMING 01.09.2022

15:00 – 15:30 CATERING / NETWORKING

16:00 MOLLIE CLAYPOOL
16:30 PROF. BENJAMIN KROMOSER
16:30 JAMIE SMILY
17:00 UPCOMMING 01.09.2022
17:30 UPCOMMING 01.09.2022

17:30 18:00 - 19:45 NETWORKING

20:30 HOTEL BAR

DIPL. ING. ANDREAS LERGE
FOUNDER TIMBERBOT

Andreas Lerge (Moderator)

Andreas Lerge is managing director and founder of Wood Real Estate GmbH and the HN Holzbau Netzwerk Germany GmbH. He is a consultant for investors, builders, banks, construction companies, and real estate developer. He is a trained carpenter, architect, and project developer. He is interested in the automation of the wood industry worldwide and promotes wood construction in the DACH region. After completing his training and working as a project developer, he is only involved in the development of timber construction in Germany and lectures throughout Germany about timber construction and real estate development. With his Webinars "Robotics in timber construction" and the Timber Network, he would like to motivate more companies to have fully automatic production for timber fabrications. Wood Real Estate GmbH has office locations in Munich and Berlin

KASSEM TAHER SALEH

MITGLIED DES 20. DEUTSCHEN BUNDESTAGES

Kassem Taher Saleh has been a member of the Bundestag since September 2021. For the Bündnis 90/Die Grünen parliamentary group, he is the chairman of the committee for housing, urban development, construction and local authorities, and a deputy member of the committee for climate protection and energy and the committee for human rights and humanitarian aid. He was born in Zakho/Iraq and grew up in Plauen in Vogtland. After completing his civil engineering studies at the TU Dresden, he worked as a site manager. In parliament he is committed to a climate-friendly and socially just turnaround in construction and brings a breath of fresh air from Sachsen to the 20th German Bundestag.

PROF. DR. CHRISTOPHER ROBELLER

PROFESSOR OF DIGITAL DESIGN AND PRODUCTION AT UNIVERSITY OF APPLIED SCIENCES AUGSBURG

Christopher Robeller is Professor of Digital Design and Production at University of Applied Sciences Augsburg. Before he leads the Digital Timber Construction group DTC at TU Kaiserslautern. He has previously worked as a postdoctoral researcher at the Swiss National Centre of Competence in Research Digital Fabrication NCCR dfab at ETH Zurich, as a doctoral assistant at the Timber Construction Laboratory IBOIS at EPFL Lausanne, and as a research associate at the Institute of Computational Design ICD, at the University of Stuttgart. Christopher holds a Doctor of Sciences from the Swiss Federal Institute of Technology EPFL, and a Professional Diploma in Architecture with Distinction from London Metropolitan University. His research of innovative timber structures, design for assembly and digital fabrication is widely published in scientific journals, books, conferences and exhibitions, and received the best paper award at the Advances in Architectural Geometry conference in 2014. The research has been implemented in prototype structures such as the ICD/itke pavilion (2010), the IBOIS curved folded wood pavilion (2013), the Vidy Theater Lausanne (2017), Annen Multihalle Manternach (2019), HexBox Canopy in Sydney (2019) and the DTC Recycleshell (2019).

WOLFGANG HORN
RANDEK & SCM PARTNER

Disrupting the housing industry.

Wolfgang Horn is founder and CEO of HORN Hausbau Technologie, the German partner of the Swedish automation pioneer Randek. Starting 7 years ago with the first robotic line for timberframe construction (ZeroLabor), Randek is technology leader in this field and supplying some of the biggest prefab-companies in the world with its unrivalled systems. The latest generation – ZeroLabor 3.0 is extremely versatile, process-reliable and well scalable, making it a superb solution for the German market. Wolfgang has more than 20 years experience with automation for the furniture and housing industry and got a deep insight in the industry as Head of the sales and marketing department at Weinmann Holzbausystemtechnik GmbH. Growing up in the countryside and as a father of four, Wolfgang believes that buildings should be produced more sustainably and should be more affordable. Automation should drive these goals forward. Wolfgang prefers solutions which can be adopted to different wall-designs, are simple to operate and can be tailored to the needs and the size of a specific company. Wolfgang knows robotics for timber construction not from theory, but from practice. That is, from plants that run day in, day out in 3-shift operation.

PROF. ANDREAS HEINZMANN

PROFESSOR AT TH ROSENHEIM AND CO-FOUNDER AT HOLZBAU.TECH GMBH

Starting with an apprenticeship as a joiner wood was always the most important part in my live. After studying wood technology, I stated working at BAUFRITZ a high-class ecological timber frame construction company working on multiple internal optimization projects. With SCHULER Consulting a HOMAG Group Company the focus switches to factory planning and production design. After 12 years working for the woodworking industry, I joined the Technical University of Rosenheim as a Professor for Production Automation and Corporate Planning. My field of research is how to increase the efficiency in the timber building process and production to reduce cost and increase the marked share of timber buildings on a large scale. Flexible Automation is my key interest to be able to produce different building types with different construction principles in the same factory with a reduced quantity of labors.

MOLLIE CLAYPOOL

CEO OF AUTOMATED ARCHITECTURE (AUAR) LTD

Designing Architecture for Automation

Mollie Claypool is CEO of Automated Architecture (AUAR) Ltd, a construction technology company revolutionising house building using automation. As a leading architectural thinker focused on issues of social justice highlighted by increasing automation in architecture and design production, Mollie believes in the potential of automation in architecture and the built environment to provide more socially engaged and environmentally sustainable ways of designing and building homes. She is co-author of Robotic Building: Architecture in the Age of Automation (Detail Edition 2019) and author of the SPACE10 report “The Digital in Architecture: Then, Now and in the Future” (2019). She is also Associate Professor in Architecture at The Bartlett School of Architecture, UCL. At The Bartlett she is Co-Director of AUAR Labs and History & Theory Coordinator in March Architectural Design. She is the Managing Editor of Prospective, an open access peer reviewed journal supported by The Bartlett. Mollie has studied at Pratt Institute, AA School of Architecture and The Bartlett.

PROF. KROMOSER

PROFESSOR TU WIEN AT THE INSTITUTE FOR STRUCTURAL ENGINEERING

Prof. Kromoser was research assistant at TU Wien at the Institute for Structural Engineering finishing his PhD in 2015 after he visited a school for higher education in the field of wood technology and interior design and his studies in civil engineering. Again, at the Institute of Structural Engineering he worked as Post-Doc until 2018 and was also visiting researcher at the Institute of Conceptual Design and Lightweight Structures at the University of Stuttgart. Since 2018 he is full Professor at the University of Natural Resources and Life Sciences Vienna (BOKU) and since 2022 he is the head of the newly founded Institute of Green Civil Engineering. Apart from that Mr. Kromoser is the speaker of the Doctoral School BUILD.NATURE which started at BOKU in 2021.

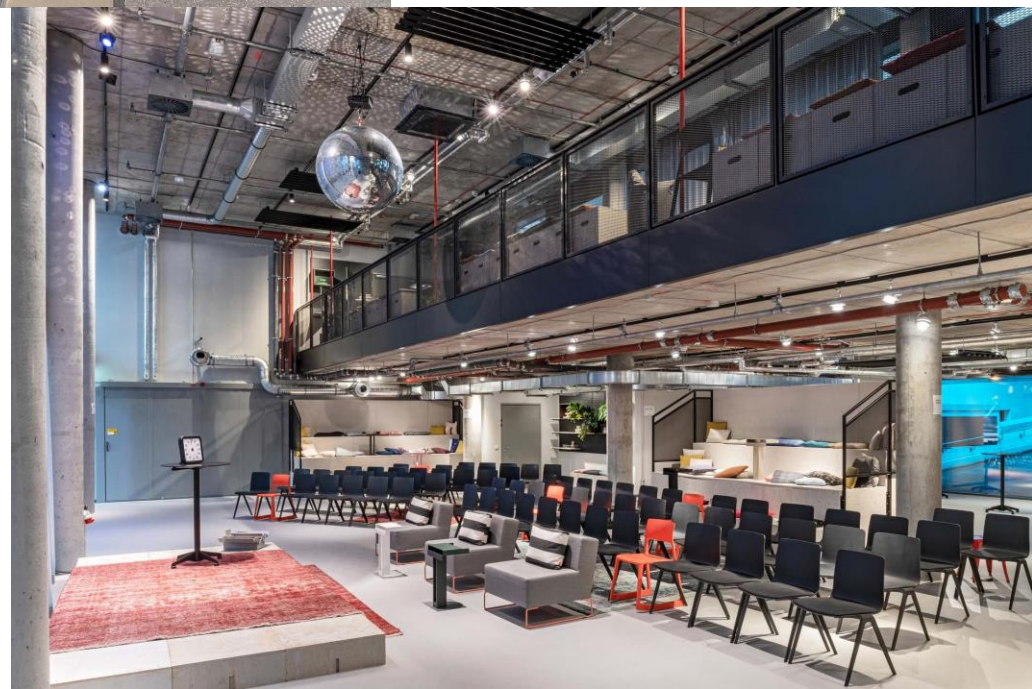
Within the presentation he will speak about the design and erection of the housing of the newly established BOKU robot laboratory. The structure represents a structurally optimized all wood truss which was processed with the ABB IRB 7600 robot. Furthermore, he will focus on currently running research projects dealing for example with robot assisted 3D printing of fully recyclable wall elements made solely renewables and robot milling and cutting of wood.

JAMIE SMILY

DIRECTOR AT XLAM SOUTH AFRICA MANUFACTURER OF CROSS LAMINATED TIMBER IN CAPE TOWN, SOUTH AFRICA

Jamie Smily is the director of XLAM South Africa, the first manufacturer of Cross Laminated Timber (CLT) in Africa. He studied architecture at Bezalel University in Jerusalem and ran an architectural practice in South Africa for a number of years before finding his way to timber manufacturing. Jamie and his team have developed their own in-house machinery and manufacturing processes for the production of CLT. The production incorporates the use of an ABB 6640 industrial robot for cutting and milling the timber panels. The company XLAM South Africa manufactures the CLT blanks which are then cut according to CAD/CAM data which has been translated from BIM software. In his presentation he will speak about the practical applications of the robot in their factory environment.

LOCATION



LOCATION

Alexanderufer 3-7
10117 Berlin

Main Station (U55) 240m
Main Station (S-Bahn 3, 5, 7, 75) 240m Bundestag (U55) 500m Per Auto B1, B2, B96, B96a

Parkhaus Contipark
Main Station Parkhaus APCOA
Luisenstraß Googel Maps:
www.timberbot.de

Contact:
Andreas Lerge 0049 (0) 15204342710 E-Mail: andreas-lerge@holzbau-netzwerk.de E-Mail: lerge@woodrealestate.info

CATERING

TIMBERBOT

Expand your network in robotic and timber construction an R&D!

We have drinks and lunch between the Programm!

CATERING

Watch the conference later in the app!

TIMBERBOT

EXHIBITION

Meet companies at the Event and expand your network.

LEIDORF
CNC TECHNOLOGIE

WOOD REAL ESTATE

UB
urban beta

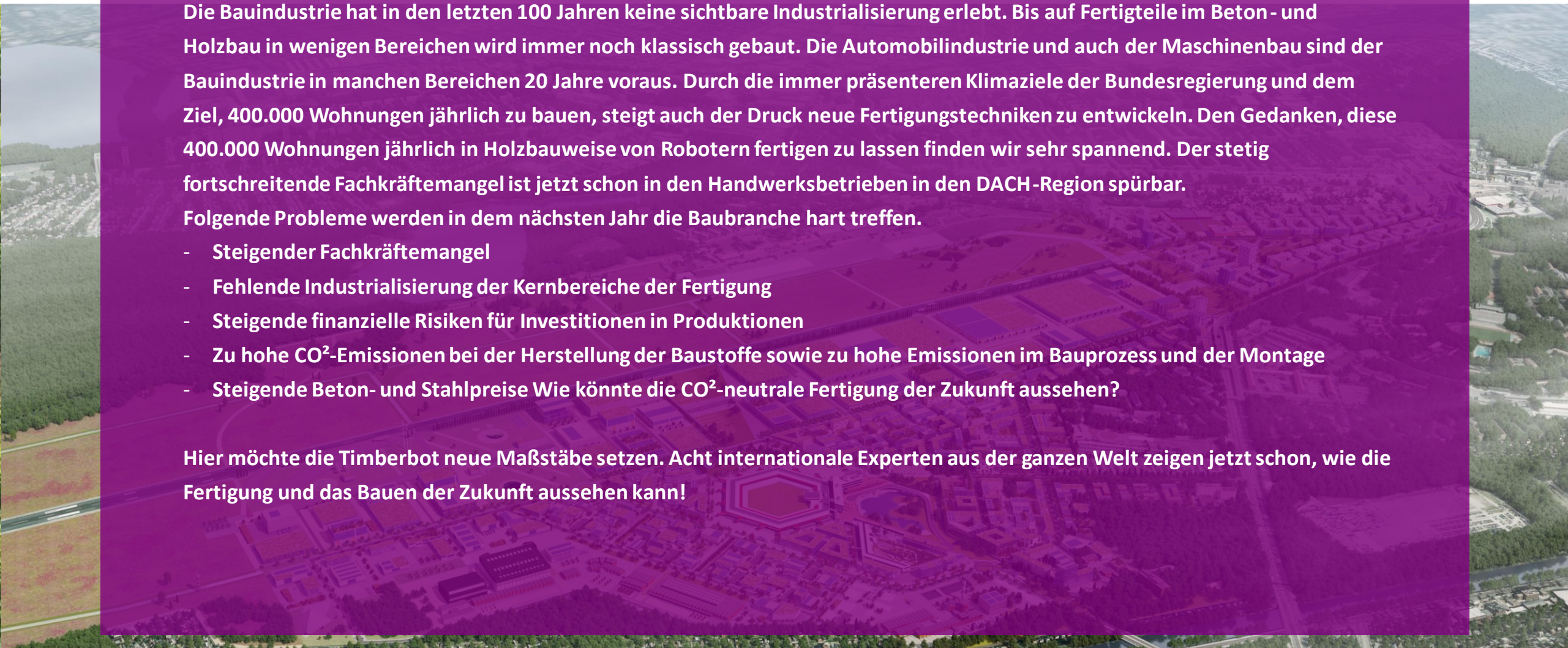
HC WEINMANN
YOUR SOLUTION

IOT + NETWORK

TICKETS

Registration, booking and payment: www.timberbot.de

Regular	**580,00 €** ink. Mwst. (19%) Total
Students	**120,00 €** ink. Mwst. (19%) Total



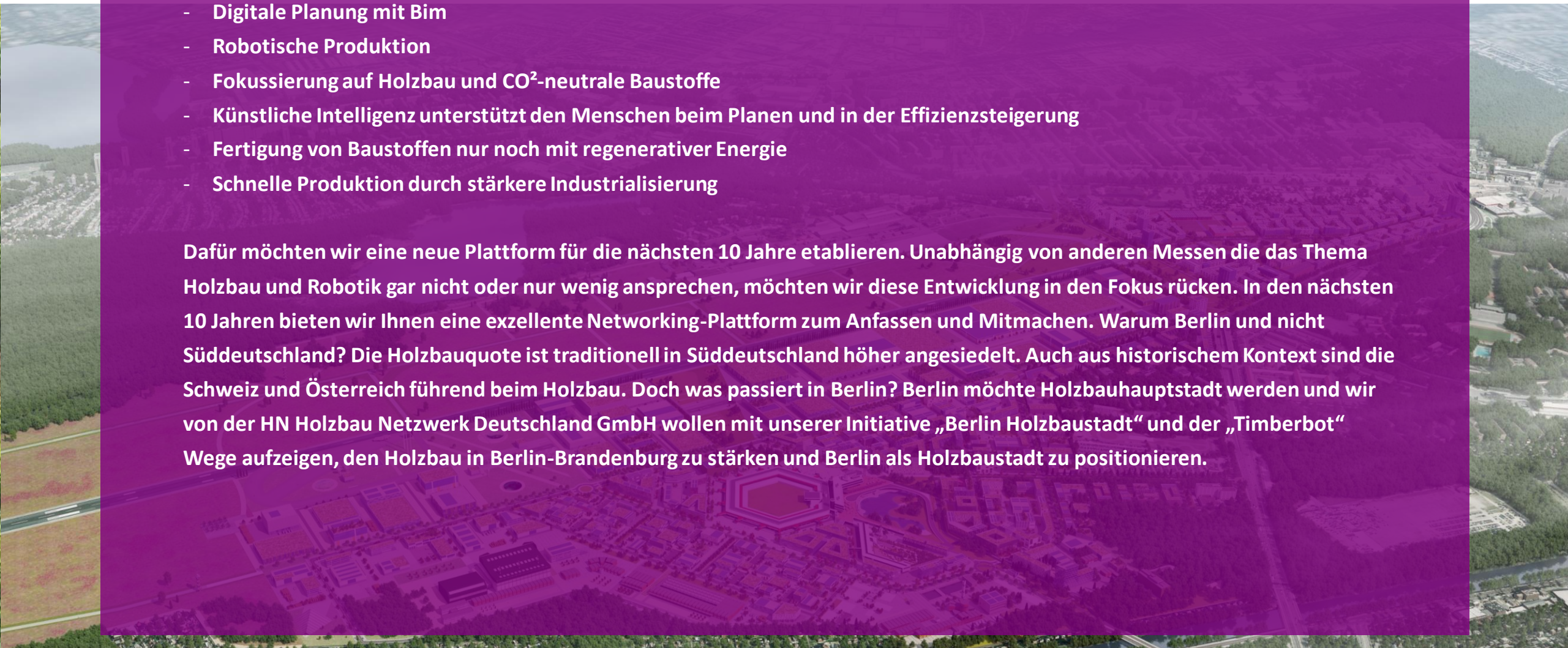
Timber und Bot – die Timberbot!

Die Bauindustrie hat in den letzten 100 Jahren keine sichtbare Industrialisierung erlebt. Bis auf Fertigteile im Beton- und Holzbau in wenigen Bereichen wird immer noch klassisch gebaut. Die Automobilindustrie und auch der Maschinenbau sind der Bauindustrie in manchen Bereichen 20 Jahre voraus. Durch die immer präsenteren Klimaziele der Bundesregierung und dem Ziel, 400.000 Wohnungen jährlich zu bauen, steigt auch der Druck neue Fertigungstechniken zu entwickeln. Den Gedanken, diese 400.000 Wohnungen jährlich in Holzbauweise von Robotern fertigen zu lassen finden wir sehr spannend. Der stetig fortschreitende Fachkräftemangel ist jetzt schon in den Handwerksbetrieben in den DACH-Region spürbar.

Folgende Probleme werden in dem nächsten Jahr die Baubranche hart treffen.

- **Steigender Fachkräftemangel**
- **Fehlende Industrialisierung der Kernbereiche der Fertigung**
- **Steigende finanzielle Risiken für Investitionen in Produktionen**
- **Zu hohe CO^2-Emissionen bei der Herstellung der Baustoffe sowie zu hohe Emissionen im Bauprozess und der Montage**
- **Steigende Beton- und Stahlpreise Wie könnte die CO^2-neutrale Fertigung der Zukunft aussehen?**

Hier möchte die Timberbot neue Maßstäbe setzen. Acht internationale Experten aus der ganzen Welt zeigen jetzt schon, wie die Fertigung und das Bauen der Zukunft aussehen kann!



Welche neuen Trends spiegeln die Bauindustrie der nächsten 20 Jahre wider?

- Digitale Planung mit Bim
- Robotische Produktion
- Fokussierung auf Holzbau und CO^2-neutrale Baustoffe
- Künstliche Intelligenz unterstützt den Menschen beim Planen und in der Effizienzsteigerung
- Fertigung von Baustoffen nur noch mit regenerativer Energie
- Schnelle Produktion durch stärkere Industrialisierung

Dafür möchten wir eine neue Plattform für die nächsten 10 Jahre etablieren. Unabhängig von anderen Messen die das Thema Holzbau und Robotik gar nicht oder nur wenig ansprechen, möchten wir diese Entwicklung in den Fokus rücken. In den nächsten 10 Jahren bieten wir Ihnen eine exzellente Networking-Plattform zum Anfassen und Mitmachen. Warum Berlin und nicht Süddeutschland? Die Holzbauquote ist traditionell in Süddeutschland höher angesiedelt. Auch aus historischem Kontext sind die Schweiz und Österreich führend beim Holzbau. Doch was passiert in Berlin? Berlin möchte Holzbauhauptstadt werden und wir von der HN Holzbau Netzwerk Deutschland GmbH wollen mit unserer Initiative „Berlin Holzbaustadt“ und der „Timberbot“ Wege aufzeigen, den Holzbau in Berlin-Brandenburg zu stärken und Berlin als Holzbaustadt zu positionieren.

„Schaut auf diese Stadt!“
Ernst Reuter

Berlin möchte auf dem alten Flughafen Berlin Tegel ein Holzbau-Kompetenz-Zentrum errichten und auch auf dem stillgelegten Flugfeld 5000 Wohnungen in Holzhybridbauweise errichten. Somit plant die Stadt mit der Tegel Projektgesellschaft die größte Holzbausiedlung der Welt. Die stark wachsende Stadt hat einen hohen Bedarf an Wohnungen und hier boomt der Bau und Kauf von Immobilien. Berlin ist keine klassische Industriestadt und sucht in den letzten Jahrzehnten nach einem starken, industriellen Rückgrat. Hier könnte die Ansiedlung von Holzbauproduktionsstätten neue Einnahmequellen und eine Revolution des Bauens anstoßen. Die Timberbot zeigt Unternehmen auf, die jetzt schon mit Robotern arbeiten und Wertschöpfung generieren. Kommen Sie zur Timberbot und Netzwerken Sie, erhalten Sie einen Einblick in die neue Welt des Bauens.

Ich freue mich auf Sie!

Andreas Lerge (Initiator Timberbot)

TIMBERBOT

Timber and Bot – the Timberbot!

The construction industry has not experienced any visible industrialization in the last 100 years. With the exception of prefabricated parts in concrete and timber construction in a few areas, traditional construction is still used. The automotive industry and mechanical engineering are 20 years ahead of the construction industry in some areas. Due to the increasingly present climate goals of the federal government and the goal of building 400,000 apartments per year, the pressure to develop new production technologies is also increasing. We find the idea of manufacturing these 400,000 wooden apartments a year by robots very exciting. The steadily increasing shortage of skilled workers is already noticeable in the craft businesses in the DACH region.

The following problems will hit the construction industry hard in the coming year.

- Increasing skills shortage
- A lack of industrialization in the core areas of production
- Increasing financial risks for investments in productions
- Too high CO^2 emissions in the manufacture of building materials as well as too high emissions in the construction process and assembly
- Rising concrete and steel prices. What could future CO^2-neutral production look like?

TIMBERBOT

What new trends will the construction industry reflect over the next 20 years?

- Digital planning with bim
- Robotic production
- Focus on timber construction and CO^2-neutral building materials
- Artificial intelligence supports people in planning and increasing efficiency
- Production of building materials only with regenerative energy
- Fast production through stronger industrialization

For this we would like to establish a new platform for the next 10 years. Regardless of other trade fairs that do not address the topic of timber construction and robotics at all or only slightly, we would like to focus on this development. In the next 10 years we will offer you an excellent networking platform to touch and participate. Why Berlin and not southern Germany? The wood construction rate is traditionally higher in southern Germany. From a historical perspective, too, Switzerland and Austria are leaders in timber construction. But what is happening in Berlin? Berlin would like to become the capital of timber construction and we at HN Holzbau Netzwerk Deutschland GmbH want to use our initiative "Berlin Holzbaustadt" and the "Timberbot" to show ways to strengthen timber construction in Berlin-Brandenburg and to position Berlin as a timber construction city.

„ Look at this city!“
Ernst Reuter

Berlin would like to set up a wood construction competence center on the old Berlin Tegel Airport and also build 5,000 apartments in hybrid wood construction on the disused airfield. The city is thus planning the world's largest wooden housing estate with the Tegel Projektgesellschaft. The rapidly growing city has a high demand for apartments and the construction and purchase of real estate is booming here. Berlin is not a classic industrial city and has been looking for a strong, industrial backbone in recent decades. The settlement of timber construction production facilities here could trigger new sources of income and a construction revolution. The Timberbot shows companies that are already working with robots and generating added value. Come to Timberbot and network, get a glimpse into the new world of construction

I look forward to see you!

Andreas Lerge (Founder Timberbot)


TIMBERBOT