## **Lucas Bernd Bierhaus**

Ahaus, Germany | +4915738418567 | Ibierhaus99@googlemail.com | LinkedIn

### **Education**

09/2018 - 07/2022 Bachelor of Engineering in International Industrial Engineering

University of Applied Sciences Emden/Leer, Emden, Germany

Relevant coursework: Mathematics, Thermodynamics, Engineering Mechanics,

Materials Science, Data Processing, Economics

02/2021 – 06/2021 **Semester Abroad Program** 

Universitat Politècnica de Catalunya, Barcelona, Spain

Relevant coursework: Air Pollution and Treatment Technologies, Ecodesign

# **Honors & Awards**

02/2021 – 06/2021 **Erasmus+ Scholarship** - Awarded by the European Union to support a semester abroad

program at the Universitat Politècnica de Catalunya in Barcelona, Spain

03/2020 – 07/2020 **PROMOS Scholarship** - Awarded by the German Academic Exchange Service (DAAD) to

support a semester abroad program at the Universidad San Ignacio de Loyola in Lima, Peru

# **Publications**

 Althoff, E., Betz, J., Bichlmeier, T., Bierhaus, L., Buchert, M., Schön-Blume, N., Dietzsch, N., Dambeck, H., Eckert, D., Göckeler, K., Görz, W., Günther, R., Helgenberger, S., Heutmanek, U., Holtz, G., Kemmler, A., Krampe, L., Lübbers, S., Merz, C., . . . Ziegenhagen, I. (2023). "Securing Germany's Sovereignty - Resilient supply chains for the transformation to climate neutrality by 2045". Commissioned by the Climate Neutrality Foundation and published on stiftung-klima.de.

# **Research Experience**

12/2022 - Present

# **Environmental Economics Research Assistant (full-time)**

Prognos AG, Düsseldorf, Germany

Conduct studies on environmental and circular economics, renewable energy technologies, natural resource dependency, green economy, climate change, and environmental indicators for clients in the public and private sectors:

- <u>Study on resource efficiency in Bavaria</u>, commissioned by the Bavarian State Office for the Environment, is ongoing.
- Report on environmental economics in the region of Munich, commissioned by the city of Munich, is ongoing.
- Report on the status of Germany's Closed-Loop Economy, commissioned by a consortium of 15 trade and industrial associations, is ongoing.
- Study on the competitiveness of clean energy technologies, commissioned by the European Union, is ongoing.

# **Professional Experience**

12/2022 - Present

## **Environmental Economics Research Assistant (full-time)**

Prognos AG, Düsseldorf, Germany

- Analyze data and statistics for various projects, including renewable energy technologies, natural resource dependency, green economy, climate change, and environmental indicators
- Create and present scientific studies on environmental and circular economics to clients in the public and private sectors

#### 03/2022 - 07/2022 **Elec**

#### Electric Vehicle R&D Bachelor's Thesis Student (full-time)

Mercedes-Benz AG, Sindelfingen, Germany

**Thesis topic**: "Analysis of the Generation of Efficiency Maps in Electric Vehicle Powertrains and the Variability of Energy Demand of Electric Vehicles Based on Driving Cycle and Vehicle Configuration"

#### 09/2021 - 03/2022

# Electric Vehicle R&D Intern (full-time)

Mercedes-Benz AG, Sindelfingen, Germany

- Managed and developed monitoring programs for R&D and test vehicles
- Conducted competitor analysis, monitored electric vehicles/components, and organized weekly meetings and team workshops

#### 07/2020 - 09/2020

## **Electrical Engineering Assistant (full-time)**

Elektrotechnik Josef Horst GmbH & Co. KG, Ahaus, Germany

- Performed electrical engineering and construction tasks, including wiring, drilling, and control and maintenance
- Installed electrical applications on construction sites for private and commercial projects

#### 06/2019 - 07/2019

### **Combined Heat and Power Plant Production Intern (full-time)**

2G Energietechnik GmbH, Heek, Germany

- Assisted in all of the six stages of the production process
- Operated machinery and executed technical tasks, including metal processing and wiring

#### 02/2019 - 04/2019

### **Production Planning Laboratory Student Assistant (part-time)**

University of Applied Sciences Emden/Leer, Emden, Germany

- Developed a model for an Industry 4.0 manufacturing system
- Prepared the <u>5-day exhibition and presentation</u> of the model to an expert audience and attendees at the renowned trade fair "Hannover Messe"

# Personal Experience & Activities

#### 06/2008 - Present

#### **Family Caregiver**

- Assist my 15-year-old younger brother, diagnosed with Down syndrome, with daily tasks, including speech therapy and physical exercise
- Visited maternal and paternal grandmother, who suffered from dementia, every weekend in a retirement home. Provided emotional support and aid with walking and feeding
- Supported widowed paternal grandfather with day-to-day activities, such as grocery shopping, gardening, and transportation to appointments

#### 10/2017 - 08/2018

#### Gap Year - Work & Travel in Australia

- Independently organized a 10-month stay in a new country including travel, housing, transportation, and employment
- Increased understanding of Australian culture by exploring all states with their urban and remote regions and adapting to cultural norms
- Acquired new skills by working in different industries, including woodwork, retail, and farming

### Skills

**Language skills** German (native), English (fluent; TOEFL iBT: 108), French & Spanish (conversational)

Computer skills MS Office/VBA, MATLAB, GaBi LCA software, SAP S/4 HANA, Siemens SinuTrain

Hobbies/Interests Nature/aerial photography, traveling, camping, diving, snorkeling, tennis, soccer