

A series of online seminars are designed for students who encounter difficulties in writing theses and want to know more about their career development in the near future. Two sub-parts will be included: *scientific writing and presentation at COVID-19 pandemic time* and *paving the way for a successful career*. Moreover, *personal consulting hours* will be offered.

All seminars will be offered virtually from mid-October until mid-December. For each week, two seminars will be given: one is regarding the topics of scientific writing and presentation, the other is regarding the topics of paving the way for a successful career. You are very welcome to join our live sessions so that you can have an immersed experience; if not possible, you will receive our recordings to follow up.

Scientific writing and presentation *at COVID-19 pandemic time*

Uncertainty and dynamicity caused by coronavirus spread anxiety through social contagion. Writing theses at this time needs more support helping writers to concentrate. Fortunately, several scientifically proven techniques can *“hack” our brain, reduce the anxiety and improve productivity*.

This part of the online seminars will introduce hands-on tools/methods for students, who are writing their master theses in this particular time, to have *a better concentration and complete their theses more effectively*. In addition, *presentation skills for the oral defense and the job interview* will be covered. For students who are interested in the *German job market*, personal working experiences in industrial and academic fields will be shared and discussed. Especially, the job market *for foreigners*, who are non-native German speakers, and visa related issues will be involved for those who want to stay longer in Germany.

Three main topics will be discussed and covered:

- **Writing a thesis at this pandemic time:**
 - How to “hack” our brain to keep the concentration while reducing the disturbances when we have to finish the thesis at home?
 - How to communicate with supervisors more effectively?
 - How to read and find useful information from papers rapidly? Read faster as a skill will be introduced in-depth, which helps us find the right papers/info in a much shorter time.
 - How to manage daily time wisely? Especially in the case when we have plenty of time to spend on our desks, but most people feel quite challenging to work on their most important things.
 - How to structure the thesis? And how to make informative yet attractive figures?
- **Scientific/Interview presentation:**
 - How to introduce yourself by leaving positive impressions?
 - How to design a simple, clear, yet concise presentation?

- What are the common mistakes made by young/junior researchers in their presentations?
- How to overcome stage fright and become a confident presenter?
- **Job market in Germany:**
 - What are the strengths and weaknesses as a foreigner in the German Job market?
 - Is the language/German a barrier to find a job?
 - What is self-marketing? How much do you know about yourself?

The seminar contents are not limited to these topics as mentioned above. The topics can also be customized and modified according to your requests and interests.

Trainer

Ph.D. candidate Jing Luo,

_Institute for Energy Engineering, Technical University of Berlin

Jing is a research and teaching assistant at TU Berlin at the Institute for Energy Engineering. *She is writing her dissertation at this moment.* Therefore, she has a deep understanding of those difficulties that students will face in their writing phase. After she attended several workshops and discussed these topics with a lot of experienced experts, and she tried different techniques personally, she would love to summarize and share these useful info/tools for further helping students. Besides, she, being a foreigner, lives in Germany for several years having the experience working as an engineer/researcher both in industry and academia, plenty of personal suggestions regarding job market in Germany can be offered.

Paving the way for a successful career

Exploiting digital tools to boost productivity and efficiency

Writing a master's thesis is an excellent opportunity to define the path for career development. Acquiring and mastering the right skills for the desired career is fundamental to ensuring success after leaving the university. The main purpose of this series of seminars is to empower students with the latest online tools for conducting research and working in teams remotely (planning, structuring, and managing a master's thesis project, collaborative online environments, and tools for surveys and remote data collection). The last two seminars are dedicated to improving (online) presentation skills and an introduction to life in Germany, including opportunities for young entrepreneurs.

The topics of the second part of the seminars are presented in the following table:

Seminar title	Topics covered
Project management	Fundamentals of project management according to the certification Project Management Professional (PMP). How to identify the least requirements to plan achieving a specified goal while understanding requirements, restraints, and context?

		<p>How to organize tasks within fixed timeframes and collaborate using modern tools (Trello, Asana, Instagantt, Telegram, MS Teams)?</p> <ul style="list-style-type: none"> • Introduction to PMP • Definition of a project (Project Charter) • Example of a project lifecycle • Project management Process Groups • Project management Knowledge Areas • Work Breakdown Structure (WBS) • “Technical” Time Management, Activities and Tasks • The cost of time vs scope • Example of a scientific paper planned as a project
Scientific writing and online collaboration		<p>Writing scientific papers, managing bibliographies in Latex, and using online collaboration environments (Overleaf, Github). How to structure a scientific paper? What is Latex, what are its advantages and how to set it up? How to setup a version control and securely save files? How to communicate and exchange with contributors to your paper?</p> <ul style="list-style-type: none"> • Introduction to Latex • Example of Latex document • Bibliography • Overleaf • Introduction to version control systems (general) • Introduction to git • Examples of git workflow • Example using git and overleaf
Collecting online data		<p>Knowledge of online survey tools and open source software for executing and managing remote data collection. What is a survey? Why collect data for scientific papers? How is data stored and organized? Which tools can I use to collect data?</p> <ul style="list-style-type: none"> • Structure of a data collection project • Interfaces for data collection (mobile or web) • Open Data Kit (introduction – how does it work) • XLSX Forms/How to design a survey • (if time allows) how to setup your own data collection project
Modern analysis	data	<p>Basic knowledge of the Jupyter environment for documentation and how to present results in a professional way. Why use Python for scientific simulations and computing? How to document scientific simulations and computing? What is Jupyter? What is Markdown? How to include my code documentation into my scientific paper?</p> <ul style="list-style-type: none"> • Introduction to Python, Anaconda, and Jupyter • Useful Python libraries • Working in environments • Important commands to organize your libraries • Version control with git • Example with Jupyter
Presenting yourself		<p>Learning online presentation and pitching skills. What is a pitch?</p> <ul style="list-style-type: none"> • How to convey an idea? • How to pitch an idea?

	<ul style="list-style-type: none"> • How to design and structure slides and presentations?
Entrepreneurship in Germany	<p>Learning how to transfer research results to the private sector, business model generation, and support programs for young entrepreneurs in Germany.</p> <ul style="list-style-type: none"> • What is a business idea? • What is a business plan? • What is a sustainable business plan? • How to become an entrepreneur in Germany?

Trainers

HEDERA Sustainable Solutions GmbH,

a spinoff from the TU Berlin (EXIST Scholarship 2018-19)

HEDERA founded by TU alumni in 2018 and mentored by Prof. T. Morozjuk. The HEDERA team is composed of Dr.-Ing. Natalia Realpe Carrillo (Colombian, PhD in Energy Engineering, TU Berlin, 2017), Dr. Lilo Wagner (German, PhD in Economics, DIW/TU Berlin, 2014), Alberto Diaz Durana (Colombian, PhD candidate in Energy Engineering, TU Berlin, 2019-present), and Dr. Alfonso Caiazzo (Italian, PhD in Applied Mathematics, TU Kaiserslautern, 2007). The team members have an international background and have undertaken their academic and professional careers in Germany for over a decade. HEDERA has collaborated with multiple students in their master's theses in the EU and Africa, supporting students in conducting applied research using HEDERA's digital tools. In the Summer Semester 2020, Natalia Realpe and Alberto Diaz Durana have been teaching the online course "Information Technology in the Microfinance Sphere of the Energy Access Market" for Master Students of the TU Berlin Campus El Gouna.