# Vera Schmitt | Curriculum Vitae

Email: vera.schmitt@tu-berlin.de

Founder and Head of XplaiNLP Group TU Berlin: https://xplainlp.github.io/

Personal webpage: <a href="https://veraschmitt.github.io/">https://veraschmitt.github.io/</a>

Google Scholar: https://scholar.google.com/citations?user=pKbJC10AAAAJ&hl=en

Born in Überlingen am Bodensee on July 03, 1990. Nationality: German



### **Professional Experience**

Since 12/2024 Member of the Center for European Research in Trusted AI (CERTAIN)

Since 10/2024 Member and Mentor of AI Grid

Since 09/2024 Granted the right to independently supervise and confer doctoral degrees (*Promotionsrecht*) with the BMBF research group funding (*VeraXtract*) following the successful defense of my PhD

Since 04/2024 Associated member of AI4Media EU Network

Since 08/2023 Expert Committee DIN Norm, Bedarf 01-15: Standardisierung von Language Technology und NLP APIs

09/2022-12/2022 Research stay in Israel at the Department of Industrial Engineering at the Tel Aviv University; collaboration with Prof. Joachim Meyer and Prof. Eran Toch

Since 04/2022 Founder and head of the XplaiNLP group at Quality and Usability Lab at TUB, at the intersection of NLP/LLM applications, XAI and HCI for high-stake decision making

Since 06/2021 Member of the Ethics Committee of Faculty IV of Technische Universität Berlin

Since 02/2020 Researcher at Technische Universität Berlin

Since 05/2017 Member of the international ChangemakerXchange network (Robert Bosch Foundation) for startups worldwide

07/2015-10/2017 Co-founder and deputy chairwoman of CorrelAid

05/2017- 10/2019 Research assistant at Max-Planck Institute for Meteorology in Hamburg (machine learning for weather forecasts), and Hapag-Lloyd GmbH in the machine learning group

### **Education**

02/2020 - 05/2024 Technische Universität Berlin: PhD student in the Quality and Usability Lab of Prof. Möller

<u>Topic</u>: Monetary Valuation of Privacy: Analyzing the Consistency of Valuation Methods and Their Influencing Factors

**Grade**: defended with *summa cum laude* (1.0/1.0)

PhD Committee: Prof. Dr.-Ing. Möller, Prof. Dr. Meyer, Prof. Dr.-Ing. Siegert, Prof. Dr. Schiering

10/2016 - 11/2019 M.Sc. Data Science; focus: machine learning; Leuphana University Lüneburg

10/2012 - 06/2016 B.A. in Politics and Public Administration; focus: Survey Science and Statistics; University of Konstanz Erasmus semester in Prague (08/2014 - 03/2015)

01/2012 - 07/2012 Basic Military Training in Seeth and Mountain Infantry in Füssen

### **Awards and Honors**

06/2024 Best Innovative Idea Award at International Conference on Quality of Multimedia Experience (QoMEX)

06/2023 Diversity and Societal Impact Award at International Conference on Quality of Multimedia Experience (QoMEX)

09/2022-12/2022 DAAD Scholarship for research stay at the Tel Aviv University

08/2014-03/2015 Scholarship, Erasmus Programme for studying abroad

### **Grants and Other Funding**

Overall funding raised by me: 4.068.066,98 € (total project funding volume 21.016.395 €)

EU Marie-Curie PSST - Privacy for Smart Speech Technology

03/2025 - 02/2028 Partners: TUB, AALTO University, EURECOM GIE, INESC ID, Stichting Radboud University, Insitut

National De Recherche, Ruhr-Universität Bochum

**Role**: Contributor (2 funded PhD students)

**Raised funds**: **521.078,40** € (total funding: 4.067.942,4 €)

BMBF- Research Group Funding - VeraXtract - Verification and Extraction of Disinformation Narratives with

Research Group Funding Individualized Explanations (ID: 01IS24066)

09/2024 - 08/2027 Associated partners: TUB, DFKI (Dr. Schmeier), TUB (Prof. Beck), Tel Aviv University (Prof. Meyer),

Deutsche Welle (DW), Deutsche Presse-Agentur (dpa), nyonic GmbH (Vanessa Cann), Ubermetrics

Technology GmbH, delphai GmbH, Crowdee GmbH

Role: PI (1 funded research group leader - me, 3 funded PhD students, 2 student researchers)

Raised funds: 1.403.742,00 €

BMBF news-polygraph - Multimodal Orchestration for Media-Content Verification, RUBIN -

05/2023 - 04/2026 *Verbundvorhaben* (ID: 03RU2U151C)

Partners: TUB, DW, rbb, DFKI, Fraunhofer IDMT, Ubermetrics, delphai, Crowdee, neurocat,

Transfermedia

Role: PI/project lead (1 funded project lead position, 2 PhD students, 4 student workers)

**Raised funds**: **1.492.547,71** € (total funding: 13.216.784,8 €)

BMBF VERANDA - Trustworthy Anonymization of Sensitive Patient Data for Remote Consultation (ID:

05/2023 - 12/2026 16KIS2047)

Partners: TUB, Charité BIH and IfSS, DFKI SLT, Fraunhofer AISEC

Role: PI/project lead (1 funded PhD student, one student worker)

**Raised funds**: **321.598,51** € (total funding: 1.998.825)

BIFOLD Agility Project FakeXplain - Development of transparent and meaningful explanations in the context of

07/2024 - 06/2027 disinformation detection

Partners: Prof. Riek (TUB), Prof. Samek (Fraunhofer HHI), Prof. Meyer (Tel Aviv University)

Role: PI/ project lead (1 funded PostDoc)

Raised funds: 269.100,36 €

#### Two proposals currently under review:

BMBF Fake-O-Meter: Multimodal AI-based disinformation assistant for education and resilience in dealing

with media disinformation

Partners: TUB (XplaiNLP Group), DFKI (SLT), Otto-von-Guericke Universität Magdeburg, DW, dpa, rbb

Role: PI

DFG - German-Israeli Adaptive AI for High-Stakes Decision Processes: Balancing Automation and Human Control

Project Cooperation Partners: Prof. Joachim Meyer (Tel Aviv University), Prof. Wojciech Samek (TUB/BIFOLD, Fraunhofer

Second stage HHI), Dr. Mahmood Sharif (Tel Aviv University), Dr. Vera Schmitt (TUB, XplaiNLP Group)

Role: PI

### **Finished projects:**

DFG LocTrace - Quantification of Perceived Location Privacy, and its Relationship to Privacy Behavior (ID:

02/2020 - 01/2023 MO 1038/28-1)

Role: project executor (my PhD is based on this project), Funds: 210.150 € (raised by Prof. Möller)

Climate Change Center Automatic Extraction of Sustainable Development Goals from Text (ateSDG)

03/2023 - 12/2023 Role: project lead (1 funded PhD student), Raised funds: 60.000 €

## **Research Group**

#### **Current PhD Students in my group:**

	2023-present	Charlott Jakob: political leaning detection, RAGs, and trustworthy AI	
	2023-present	Premtim Sahitaj: knowledge-based reasoning, evidence retrieval with external knowledge bases	
	2023-present	Luis-Felipe Villa-Arenas: model faithfulness, faithful information retrieval, faithful XAI generation	
	2023-present	Ibrahim Baroud: anonymization of text-based medical records, medical decision-support	
	2024-present	Qianli Wang: post-hoc XAI, natural language explanation generation, LLM-as-a-Judge, quantization	
	2025-present	Arthur Hilbert: multi-level XAI, faithful XAI generation with logic-based approaches and causal reasoning	
	2025-present	Max Upravitelev: narrative extraction, RAGs, faithful information retrieval, rule-based approaches	
	2025-present	Joao de Mata: HCI, dynamic role allocation of human-AI decision making for high-stake domains	
	2025-present	Shengyun Si (will start in April 25): improving model architectures for MLLMs for high-stake domains	
Moreover, the PhDs are supported by 6 student researchers (4 student researchers are currently in the employment process)			

#### **Current postdoctoral researchers in my group:**

2025-present	Dr. Veronika Solopova: leading NLP/MLLM team for mis-and- disinformation
2024-present	Dr. Jing Yang: leading XAI team for mis-and- disinformation
2025-present	Nils Feldhus: leading XAI team for medical decision-support
2024-present	Dr. Lisa Raithel: leading NLP/MLLM team for medical decision-support

#### Founder and head of XplaiNLP research group:

2023-present	<b>Dr. Vera Schmitt</b> (since I have defended my PhD and acquired the additional BMBF research group funding
	"VeraXtract". I can independently supervise PhD students in my group)

## **Scientific and other Collaborations (Selection)**

The XplaiNLP group actively collaborates with all partners involved in the various ongoing research projects, fostering strong research ties with both academic institutions and industry leaders. Beyond these projects, we maintain research collaborations with several international researchers to further strengthening our network and interdisciplinary impact:

Germany	Prof. Sebastian Möller (TUB, QUL), Prof. Dorothea Kolossa (TUB, MTEC), Prof. Wojciech Samek
•	(TUB/BIFOLD/Fraunhofer HHI), Prof. Maija Poikela (BIH Charité). Prof. Klaus Beier (IfSS Charité), Dr. Jonas
	Fegert (FZI, KIT), Dr. Tim Polzehl (DFKI, SLT), Dr. Kevin Baum (DFKI, Responsible AI and Machine Ethics
	Group), Dr. Simon Ostermann (DFKI, Efficient and explainable NLP models Group), Prof. Ingo Siegert (OVGU), Dr.
	Patrick Aichroth (Fraunhofer IDMT)
Icrael	Prof. Josephim Mayer (Tel. Aviv University - collaboration on intelligent decision support systems)

Israel Prof. Joachim Meyer (Tel Aviv University - collaboration on intelligent decision support systems)
Prof. Eran Toch (Tel Aviv University - collaboration on usable privacy topics)
Prof. Yoella Bereby-Meyer (Ben-Gurion University of the Negev - collaboration on social decision making)

Japan Prof. Junichi Yamagishi (National Institute of Informatics Tokyo, Yamagishi Lab, RAGs, fact-checking, LLMs), the PhD Premtim Sahitaj just went for a research stay for four months to his lab

Denmark Prof. Isabelle Augenstein (head of Copenhagen Natural Language Understanding research group), starting a collaboration, the PhD Qianli Wang and I will visit her group in September 2025, where he will stay for a longer research exchange

USA Prof. Nickel (Bucknell University in Lewisburg) - collaboration via the noFake project

Spain Prof. Paolo Rosso (Universitat Politècnica de València - collaboration on NLP/LLMs and fact-checking)

Finland Prof. Tom Bäckström (AALTO University - collaboration on privacy in speech)

UK Prof. James Nicholson (Northumbria University - collaboration on privacy engineering)

Brazil Prof. Dante Barone (Dante Barone Universidade Federal do Rio Grande do Sul - collaboration on NLP)

Media dpa, DW, rbb

Industry DeepNews, Ubermetrics Technologies, delphai, Transfermedia, Crowdee, Siemens, Bosch, Acatech, SoftwareCampus

Scientific Startup Graetchen.AI

Advisor

### **Scientific Community Service**

#### **Reviewer for:**

- ACM CHI Conference on Human Factors in Computing Systems
- ACM Forum for Information Retrieval Evaluation (FIRE)
- ACM International Journal of Human Computer Studies
- IEEE Journal of Transactions on Computational Social Systems
- Journal of Cognitive Systems Research
- Journal of Computers & Security
- Journal of Computers and Electrical Engineering
- xAI World Conference
- AAAI Conference on Human Computation and Crowdsourcing (HCOMP)
- International Conference on Speech and Computer (SPECOM)
- International Conference on Electronics, Communications and Networks (CECNet)
- Mensch und Computer (MuC)

#### **PC/Editorial Board Member:**

- ACL Area Chair (Industry Track 2025)
- ACM International Workshop on Multimedia AI against Disinformation (MAD'25) at ICMR conference
- Journal of Advance in Information Technology and Computer Science
- Mensch und Computer (MuC)

### **Interviews (Selection)**

#### About my research group:

02/2025 Interview with **TU Berlin**:

<u>Press release</u>: "Resilient gegen Desinformation – mit KI im Kampf für gesellschaftlichen Zusammenhalt" <a href="https://www.tu.berlin/nachrichtendetails/resilient-gegen-desinformation-mit-ki-im-kampf-fuer-gesellschaftlichen-zusammenhalt" <a href="https://www.tu.berlin/nachrichtendetails/resilient-gegen-desinformation-mit-ki-im-kampf-fuer-gesellschaftlichen-zusammenhalt">https://www.tu.berlin/nachrichtendetails/resilient-gegen-desinformation-mit-ki-im-kampf-fuer-gesellschaftlichen-zusammenhalt</a>

<u>Interview</u>: "Wir wollen die gesellschaftliche Widerstandsfähigkeit gegenüber Desinformation stärken." <a href="https://www.tu.berlin/news/interviews/forschungsgruppe-xplainlp">https://www.tu.berlin/news/interviews/forschungsgruppe-xplainlp</a>

10/2024 <u>Interview:</u> with AI Berlin about my research group: <a href="https://ai-berlin.com/blog/article/dr-vera-schmitt-head-of-xplainlp-group-at-tu-berlin">https://ai-berlin.com/blog/article/dr-vera-schmitt-head-of-xplainlp-group-at-tu-berlin</a>

#### **Mis-and Disinformation:**

- 02/2025 Interview BBC News Russia: "Record results for the far right in the German elections. Why are they so popular? | BBC report" access documentary: <a href="https://www.youtube.com/watch?v=mwHMOU09QOI">https://www.bbc.com/russian/articles/c8j0y782mlgo</a>
- 02/2025 <u>Interview DW</u>: "Fact check: AI influencers targeting German elections" access interview: <a href="https://www.dw.com/en/fact-check-ai-influencers-targeting-german-elections/video-71514325">https://www.dw.com/en/fact-check-ai-influencers-targeting-german-elections/video-71514325</a>
- 02/2025 <u>Interview Tagesschau:</u> "Rechts, weiblich, fake", access interview: <a href="https://www.tagesschau.de/faktenfinder/kontext/rechte-ki-influencer-100.html">https://www.tagesschau.de/faktenfinder/kontext/rechte-ki-influencer-100.html</a>
- 02/2025 <u>Interview EFE/SwissInfo CH</u>: "Las elecciones alemanas, asediadas por la desinformación y la injerencias rusa y de Musk" access interview: <a href="https://www.swissinfo.ch/spa/las-elecciones-alemanas%2C-asediadas-por-la-desinformaci%C3%B3n-y-la-injerencias-rusa-y-de-musk/88890581">https://www.swissinfo.ch/spa/las-elecciones-alemanas%2C-asediadas-por-la-desinformaci%C3%B3n-y-la-injerencias-rusa-y-de-musk/88890581</a>

- 02/2025 <u>Interview Télévision Française 1 (TF1)</u>: "VÉRIF' Élections en Allemagne : comment l'extrême droite utilise l'IA pour désinformer", access interview: <a href="https://www.tflinfo.fr/international/verif-elections-en-allemagne-2025-comment-l-afd-utilise-l-intelligence-artificielle-ia-a-des-fins-de-desinformation-2351527.html">https://www.tflinfo.fr/international/verif-elections-en-allemagne-2025-comment-l-afd-utilise-l-intelligence-artificielle-ia-a-des-fins-de-desinformation-2351527.html</a>
- 06/2024 **WDR radio interview**: "Deepfakes erkennen mit KI", access interview:

  <a href="https://www1.wdr.de/mediathek/audio/wdr5/wdr5-toene-texte-bilder-interviews/audio-deepfakes-erkennen-mit-ki-100.html">https://www1.wdr.de/mediathek/audio/wdr5/wdr5-toene-texte-bilder-interviews/audio-deepfakes-erkennen-mit-ki-100.html</a>
- 05/2024 RadioEins rbb: "Deepfakes Our New Reality? Access interview:

  <a href="https://www.radioeins.de/programm/sendungen/sondersendung/re-publica-2024/beitraege/deepfakes---our-new-reality---.html#top">https://www.radioeins.de/programm/sendungen/sondersendung/re-publica-2024/beitraege/deepfakes---our-new-reality---.html#top</a>

### **Other Topics:**

01/2025 <u>Press Release TU Berlin:</u> DeepSeek vs OpenAI - Expert Interview: <a href="https://www.tu.berlin/news/pressemitteilung/tu-berlin-expertinnen-zum-juengsten-erfolg-von-deepseek">https://www.tu.berlin/news/pressemitteilung/tu-berlin-expertinnen-zum-juengsten-erfolg-von-deepseek</a>

The full list of interviews can be found here: https://veraschmitt.github.io/talks/

## **Keynotes and Invited Talks (Selection)**

2025 **Panel Discussion: Aktionswoche ARD zur Bundestageswahl** - live at rbb24 and ARD: "Fakten statt Fiktion – Gemeinsam gegen Desinformation"

<u>Panel members</u>: Alexandra Geese (EU Parliament, Dr. Vera Schmitt (Head of XplaiNLP Group), Jörg Müller (Head of the Office for the Protection of the Constitution Brandenburg), Patrick Stegemann (journalist and CEO of "Undone") - live stream in **ARD** 

Link: https://shorturl.at/IrxUR

2024 Panel Discussion: "How does AI help with fact-checking"

<u>Panel members</u>: Prof. Sebastian Möller (TU Berlin), Prof. Sabine Ammon (TU Berlin), Prof. Dorothea Kolossa (TU Berlin), Dr. Vera Schmitt (Head of XplaiNLP Group), moderated by Wolfgang Richter <u>Link</u>: <a href="https://www.tu.berlin/nachrichtendetails/einladung-wie-hilft-ki-beim-faktenchecken">https://www.tu.berlin/nachrichtendetails/einladung-wie-hilft-ki-beim-faktenchecken</a>

2024 Invited talk: Falling Walls Science Summit

Title: "Presentation of news-polygraph project for multimodal mis-and disinformation detection"

2024 Invited talk: re:publica

<u>Title</u>: "Deepfakes - Our New Reality?

2024 Invited keynote: Innerbehördliche Kooperation 2024 – IBK 24 Meißen

Title: Deepfakes – Unsere neue Realität?

2024 Invited talk: dpa (with 130 journalists from all media outlets in Germany)

Title: "KI Wegweiser" what can we do with LLMs for fact checking?

2024 Invited talk: SoftwareCampus

Title: "How to regulate AI?" introducing the AI Act, DSA and DA for LLM applications

2024 **Invited talk**: Digital Technologies and Responsibility Euregio-Workshop at the Interface of Technology, Academia and Public

Title: "Do explanations make a difference?"

2023 **Invited keynote**: 3th **Symposium** on Security and Privacy in Speech Communication Title: "Multimodal Fake News Detection and the AI Act"

- 2023 Panel discussion: "AI-Regulation and Data-Protection: Perspectives from the World" SPSC Symposium Panel members: Prof. Jennifer Williams, Prof. Sneha Das, Prof. Tom Bäckström, and Vera Schmitt, moderated by Prof. Ingo Siegert
- 2023 **Invited talk**: Expert Workshop on Artificial Intelligence and Human Rights Federal Foreign Office incubator session prepared and hosted with the Bertelsmann Foundation together

  Title: "Fact Matters! The Role of AI in Combating Digital Disinformation"
- 2023 **Panel discussion**: Das Katz- und Mausspiel der Desinformation

<u>Panel members</u>: Dr. Eva Flecken (MABB), Jana Heigl (BR Faktenfuchs), Georg Heil (ARD-Politikmagazins "Kontraste"), Stefan Voß (dpa)

Link: https://events.rbb-online.de/b/?p=newspolygraph&host=events.rbb-online.de

2022 Invited talk: Tel Aviv University

- Title: "Usable Security and Privacy"
- 2022 Invited talk: Usable Security and Privacy Day 2022

Title: "What is Your Privacy Worth?"

2021 Panel discussion: Usable Security and Privacy Day 2021

<u>Panel members</u>: Prof. Ahmad-Reza Sadeghi (TU Darmstadt), Prof. Simone Fischer-Hübner (Karlstad University), Prof. Joachim Meyer (Tel Aviv University), Dr. Aljoscha Burchardt (DFKI), CTO Philipp Berger (neXenio), moderated by Vera Schmitt and Prof. Sebastian Möller

2017 **Panel discussion**: Bayreuther Dialoge "Big Data – Chance oder Risiko"

<u>Panel members</u>: Konstantin von Notz (Grüne), Nikolaus Blome (BILD-Zeitung); Vera Schmitt (damals co-Founder CorrelAid), Denny Vorbrücken (Bund Deutscher Kriminalbeamter)

The full list of keynotes and panel discussions can be found here: https://veraschmitt.github.io/talks/

### **Teaching**

- Since WS 2020 Supervision of 21 final theses (16 MA theses, and 5 BA theses)
  - SS 2025 Usability Engineering Exercise/ Advanced Study Projects (9 ECTS) projects
- WS 2024/2025 Projects (9 ECTS) projects with M.A. students
  - SS 2024 Advanced Study Projects (9 ECTS) project with M.A. students LLM for information extraction project
- WS 2023/2024 Advanced Study Projects (9 ECTS) project with M.A. students LLM for fact checking
  - SS 2023 Advanced Study Projects (9 ECTS) 2 projects on Fusion Models and GANs for synthetic data generation and LLM-based Sustainable Development Goal (SDG) detection
- WS 2022/2023 Usable Privacy Seminar for M.A. students (3 ECTS)
  - SS 2022 Advanced Study Projects (9 ECTS) 2 projects with B.A. students on HCI and LLM-based Sustainable
    Development Goal (SDG) detection challenge
    Projekt Medienerstellung (6 ECTS) 2 projects on building an intelligent hydroponic system, and location privacy
    engineering
    Usability Engineering Exercise
- WS 2021/2022 Usable Privacy Seminar for M.A. students (3 ECTS)
  Advanced Statistics Seminar for M.A. students (3 ECTS)
  - SS 2021 Projekt Medienerstellung (6 ECTS) 2 projects on HCI and building and intelligent hydroponic system
- WS 2020/2021 Usable Privacy Seminar for M.A. students (3 ECTS)
  Advanced Statistics Seminar for M.A. students (3 ECTS)
  - SS2020 Advanced Study Projects (9 ECTS) project with M.A. students usable privacy engineering Projekt Medienerstellung (6 ECTS) project with B.A. students on HCI