

Tim Baumgärtner

PhD Candidate UKP TU Darmstadt

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Curriculum Vitae

Experience **PhD Candidate** | Technische Universität Darmstadt

Nov 2020 - present, Darmstadt, Germany

PhD candidate at the Ubiquitous Knowledge Lab, supervised by Prof. Dr. Iryna Gurevych

Data Scientist | *Serviceware SE*

Dec 2019 - Oct 2020, Darmstadt, Germany

Implementation, evaluation and deployment of Machine Learning models for document retrieval and classification; Development of a web UI for client demonstrations; Containerization of machine learning models for microservices architecture

Extreme Blue Intern | IBM

Jun 2019 - Oct 2019, Böblingen, Germany

Desert Locust outbreak prediction using Machine Learning based on White Stork GPS migration data by the Max Planck Institute of Animal Behaviour and Desert Locust Data by the Food and Agriculture Organization of the United Nations.

Teaching Assistant | *University of Amsterdam*

Nov 2017 - Dec 2017 & Jun 2018, Amsterdam, Netherlands

Supporting first year MSc AI students with coursework and supervisor for a two-month student project on visual question answering and one-month student research project on visual dialogue.

Business Analyst | *Boehringer Ingelheim*

Oct 2015 - Jun 2016, Biberach an der Riß, Germany

Project Lead for interface development between data warehouse and clinical trial management system.

Leading role in the initiative for the implementation of structured medical documents.

Integrated Degree Student | *Boehringer Ingelheim*

Sep 2012 - Sep 2015, Biberach an der Riß, Germany & Ridgefield, CT, USA

Implementation of a database system for quality measurements of medical coding.

Bachelor thesis on commercial software for structured document architectures.

Education **MSc. Artificial Intelligence** | *University of Amsterdam* | GPA 8.25¹
Sep 2016 - Jun 2019, Amsterdam, Netherlands
Master Thesis on “Belief State for Visually Grounded, Task-Oriented Neural Dialogue Model” ([github](#), [pdf](#))

BSc. Medical Informatics | *Duale Hochschule Baden-Württemberg* | GPA 1.8²
Oct 2012 - Sep 2015, Heidenheim an der Brenz, Germany
Bachelor Thesis on “Evaluation of Commercial Tools for Structured Clinical Trial Protocol Authoring”

Skills **Coding**
Python (PyTorch, Numpy, Matplotlib, Pandas), JavaScript (Angular), Git, SQL, Docker, Microservices

Data Science
Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Multimodality, Dialogue Systems

Languages
German (native), English (fluent)

Publications **The PhotoBook Dataset: Building Common Ground through Visually-Grounded Dialogue**, Janosch Haber, [Tim Baumgärtner](#), Ece Takmaz, Lieke Gelderloos, Elia Bruni, Raquel Fernández, *ACL 2019*

On the Realization of Compositionality in Neural Networks, Joris Baan, Jana Leible, Mitja Nikolaus, David Rau, Dennis Ulmer, [Tim Baumgärtner](#), Dieuwke Hupkes, Elia Bruni, *ACL 2019 BlackboxNLP Workshop*

Beyond task success: A closer look at jointly learning to see, ask, and GuessWhat, Ravi Shekhar, Aashish Venkatesh, [Tim Baumgärtner](#), Elia Bruni, Barbara Plank, Raffaella Bernardi, Raquel Fernández, *NAACL 2019*

Adding Object Detection Skills to Visual Dialogue Agents, Gabriele Bani, [Tim Baumgärtner](#), Aashish Venkatesh, Davide Belli, Gautier Dagan, Alexander Geenen, Andrii Skliar, Elia Bruni, Raquel Fernandez, *ECCV 2018 SiVL Workshop*

Ask No More: Deciding when to guess in referential visual dialogue, Ravi Shekhar, [Tim Baumgärtner](#), Aashish Venkatesh, Elia Bruni, Raffaella Bernardi, Raquel Fernandez, *COLING 2018*

¹ Dutch GPA from 10 (best) to 1 | [UvA Grading Scheme](#)

² German GPA from 1 (best) to 5