

Marius Memmel

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EDUCATION

University of Washington (UW) <i>PhD Student in Computer Science & Engineering, GPA: 3.81/4.00, in progress</i> Advisors: Prof. Dieter Fox, Prof. Abhishek Gupta	Seattle, US Sept. 2022 – Present
Technical University of Darmstadt (TU Darmstadt) <i>Master of Science, Grade 1.1 (scale 1-6, 1 best), GPA: 3.94/4.00, Top 6.93%</i> Major: Computer Science, <i>Minor:</i> Entrepreneurship & Innovation	Darmstadt, DE Oct. 2019 – Sept. 2022
Swiss Federal Institute of Technology Lausanne (EPFL) <i>Swiss-European Mobility Programme / Exchange Program, Master Thesis</i>	Lausanne, CH Sept. 2021 – May 2022
Appalachian State University <i>Exchange Program, GPA: 4.0/4.0</i>	Boone, US Aug. 2018 – Dec. 2018
Baden-Württemberg Cooperative State University (DHBW) <i>Bachelor of Science, Final Grade 1.4 (scale 1-6, 1 best), GPA: 3.97/4.00, Rank 1</i> Major: Business Information Systems, <i>Concentration:</i> Software Engineering	Mannheim, DE Aug. 2016 – Sept. 2019

PUBLICATIONS

- [7] **Memmel M.***, Berg K.*, Chen B., Gupta A.†, Francis J.† "STRAP: Robot Sub-Trajectory Retrieval for Augmented Policy Learning", *pre-print*, 2024 [paper]
- [6] Chen Z., Walsman A., **Memmel M.**, Mo K., Fang A., Fox D.†, Gupta A.† "URDFormer: A Pipeline for Constructing Articulated Simulation Environments from Real-World Images", *Robotics: Science and Systems* (RSS), 2024 [paper]
- [5] Khazatsky K., Pertsch K., Nair S., ..., **Memmel M.**, ..., Kollar T., Levine S., Finn C. "DROID: A Large-Scale In-The-Wild Robot Manipulation Dataset", *Robotics: Science and Systems* (RSS), 2024 [paper]
- [4] **Memmel M.**, Wagenmaker A., Zhu C., Fox D., and Gupta A. "ASID: Active Exploration for System Identification and Reconstruction in Robotic Manipulation", *International Conference on Learning Representations* (ICLR) (**oral, top 1.2%**), 2024 [paper]
- [3] **Memmel M.**, Bachmann R., and Zamir A., "Modality-invariant Visual Odometry for Embodied Vision", *Conference on Computer Vision and Pattern Recognition* (CVPR), 2023 [paper] [arxiv] [code]
- [2] Stammer W., **Memmel M.**, Schramowski P., and Kersting K., "Interactive Disentanglement: Learning Concepts by Interacting with their Prototype Representations", *Conference on Computer Vision and Pattern Recognition* (CVPR), 2022 [paper] [arxiv] [code]
- [1] **Memmel M.**, Liu P., Tateo D., and Peters J., "Dimensionality Reduction and Prioritized Exploration for Policy Search", *Artificial Intelligence and Statistics* (AISTATS), 2022 [paper] [arxiv] [code]

* equal contribution, † equal advising

WORKSHOP & RESEARCH PROJECTS

- [2] **Memmel M.**, Gonzalez C., and Mukhopadhyay A., "Adversarial Continual Learning for Multi-Domain Hippocampal Segmentation", in *Domain Adaptation and Representation Transfer* (DART) Workshop at *Medical Image Computing and Computer Assisted Intervention* (MICCAI), 2021 [paper] [arxiv] [code]
- [1] **Memmel M.***, Reich C.*, Wagner N.*, and Saeedan F., "Scalable 3D Semantic Segmentation for Gun Detection in CT Scans", *arXiv preprint* 2020 [arxiv] [code]

THESES

Master Thesis: "Multi-modal Vision Transformers For Data-Efficient Visual Odometry In Embodied Indoor Navigation", Supervisor: Prof. Amir Zamir and Prof. Stefan Roth, TU Darmstadt, 2022 [thesis]

Bachelor Thesis: "Conception and Development of a Machine Learning Model for the Analysis of the Energy Consumption of a Plasterboard Dryer", Supervisors: Prof. Julian Reichwald and Halgurt Bapierre, DHBW, 2019 [thesis]

WORK & RESEARCH EXPERIENCE

Graduate Research Assistant Seattle, US
Paul G. Allen School of Computer Science & Engineering Sept. 2022 – Present

Robot Learning Research Intern Pittsburgh, US
Bosch USA June 2024 – Sept. 2024

- Supervised by Jonathan Francis and Bingqing Chen

Student Research Assistant Darmstadt, DE
Artificial Intelligence and Machine Learning Lab, TU Darmstadt Nov. 2020 – Aug. 2021

- Supervised by Prof. Kristian Kersting and Wolfgang Stammer

Student Research Assistant Darmstadt, DE
Medical & Environmental Computing Lab, TU Darmstadt Oct. 2020 – March 2021

- Supervised by Anirban Mukhopadhyay and Camila Gonzalez

Machine Learning Engineer (part-time) Frankfurt, DE
Sopra Steria Group SA Jan. 2020 – Dec. 2020

Software Engineer (part-time) Würzburg, DE
Knauf IT Aug. 2016 – Sept. 2019

AWARDS & SCHOLARSHIPS

European Informatics Student Award
Award for the brightest European students to facilitate understanding among the nations 2022

Deutschlandstipendium
Merit-based scholarship given to less than 1% of all students in Germany 2019 – 2020

Best Graduate
Award for the best graduate of Business Information Systems (Software Engineering) at DHBW 2019

Baden-Württemberg-Stipendium
Scholarship given to 1500 high-achieving students/year to promote exchange 2018

VOLUNTEERING

Volunteer Firefighter Schweinfurt, DE
Freiwillige Feuerwehr Ettleben e.V. June 2010 – Sept. 2022

Team Confidant Darmstadt, DE
Darmstadt Athenas e.V. May 2021 – Oct. 2021

Social Welfare Officer Darmstadt, DE
Darmstadt Athenas e.V. Apr. 2020 – May 2021

Head Organizer Campfire Cup Würzburg, DE
Broombreakers Quidditch Club June 2018 – June 2020

Au Pair / English Teacher Beijing, CN
LoPair Education Nov. 2015 – May 2016