

Experience

PhD candidate Inria Sep 2017 – Oct 2021

Advisor: Cordelia Schmid (h-idx 132) Grenoble, France

- Published 5 papers at top-tier conferences in various domains, including imitation and reinforcement learning, robotics, computer vision, natural language processing, transformers, multimodal learning, and sim2real transfer.
- Pioneered robot learning research at Inria under Dr. Schmid's supervision. The lab effort now consists of 15+ people.
- Introduced methods for learning robot skills outperforming classical approaches by combining learning paradigms.
- Developed a method to transfer control learned in simulation to real robots by exploiting parallel computations.
- Supervised 2 interns, taught algorithms to a class of 30 students, collaborated with 4 engineers and 1 PhD student.

Research Intern Google Research Sep 2020 – Mar 2021

Advisor: Chen Sun (h-idx 32) Paris, France

- Improved results on a Vision Language Navigation task by 74% by developing a multimodal transformer architecture.
- Published the work at the ICCV conference (A1, 25.9% acceptance rate).
- Accelerated training of open-source code by 200% by employing a multi-process data loading and LMDB databases.
- Implemented multi-GPU training with TensorFlow for internal clusters and open-sourced models with PyTorch.

Research Intern Inria Feb 2016 – Jun 2016

Advisor: Radu Horaud (h-idx 64) Grenoble, France

- Invented an outlier detection algorithm achieving state-of-the-art results by leveraging Gaussian mixture models.
- Co-authored a work published in Pattern Recognition Letters journal. Implemented the method in Matlab.

Education

- **Ph.D. Computer Science**, Grenoble Alpes University, France. [[thesis](#)] Sep 2017 – Oct 2021
- **M.Sc. Informatics**, Grenoble INP, France. [GPA 16.47/20, summa cum laude, top 2%] Sep 2015 – Jun 2017
Excellence Scholarship of Grenoble INP (2016); French Government Study Scholarship (2015)
- **B.Sc. Applied mathematics**, MIPT - #3 ranked university in Russia. [GPA 4.51/5, top ~10%] Sep 2011 – Jun 2015

Skills

- Technologies: Python, PyTorch, TensorFlow, Unix, PyBullet (physics engine), Dask (parallel computing).
- Domains: Deep imitation & reinforcement learning, control, robotics, computer vision, NLP, transformers.
- Other: Neural networks, machine learning, distributed GPU & CPU training, data structures, algorithms.

Publications

- Pashevich, Schmid, Sun. Episodic Transformer for Vision-and-Language Navigation. In ICCV 2021 [[github](#)]
- Pashevich, Kalevatykh, Laptev, Schmid. Learning visual policies for building 3D shape categories. In IROS 2020
- Strudel, Pashevich, Kalevatykh, Laptev, Sivic, Schmid. Learning to combine primitive skills: A step towards versatile robotic manipulation. In ICRA 2020 [[github](#)]
- Pashevich, Strudel, Kalevatykh, Laptev, Schmid. Learning to augment synthetic images for sim2real policy transfer. In IROS 2019 [[github](#)]
- Pashevich, Hafner, Davidson, Sukthankar, Schmid. Modulated Policy Hierarchies. In Deep RL workshop, NeurIPS 2018
- Marriott, Pashevich, Horaud. Plane-extraction from depth-data using a Gaussian mixture regression model. PRL

Interests

- Fluent in English, French, Spanish, and Russian.
- Exploring the world by traveling and learning about cultures and history. Visited more than 50 countries.
- Snowboarding, volleyball, and everything related to mountains.