

Jens Petit

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EDUCATION

SCADS.AI | DOCTORAL CANDIDATE

Since June 2020 | Leipzig, Germany

- working on machine learning for graphs

TECHNICAL UNIVERSITY OF MUNICH | M.Sc. ROBOTICS, COGNITION, INTELLIGENCE

Oct 2017 – May 2020 | Munich, Germany

- Master thesis: "Improving efficiency in X-ray computed tomography using compile-time programming and heterogenous computing" at the group of Inverse Problems of the chair of Computer Aided Medical Procedures with awarded grade of 1.0
- selected courses: Machine Learning, Introduction to Deep Learning, Advanced Deep Learning for Robotics, Large-scale Machine Learning lab course, Cognitive Systems
- graduated with GPA of 1.3 and ranked within the top ten percent

KEIO UNIVERSITY | VISITING RESEARCH STUDENT

Apr 2016 – Oct 2016 | Tokyo, Japan

- member of the Namerikawa Laboratory at the Institut for System Design Engineering
- Bachelor thesis: "Distributed Consensus-based Formation Control of Quadrotors with Formation Feedback" with awarded grade of 1.0

UNIVERSITY OF STUTTGART | B.Sc. MECHATRONICS

Oct 2013 – Apr 2017 | Stuttgart, Germany

- GPA of 1.5 and ranked second out of all graduates in 2017

JOHANNES-KEPLER-GYMNASIUM | HIGH SCHOOL STUDENT

June 2012 | Weil der Stadt, Germany

- graduated with distinction and best possible GPA of 1.0

EXPERIENCE

GOOGLE SUMMER OF CODE | SUMMER INTERN

May 2019 – Aug 2019 | Remote

MovelIt is a robot motion planning framework and one of the most popular packages in the Robot Operating System (ROS) ecosystem. It is a community driven open source project which is developed and maintained by a group of passionate robotics engineers all over the world. During a three month period, I added Bullet as a collision checking library. This adds the capability to detect collisions in a continuous fashion between two discrete robot states.

TRUMPF GMBH & CO. KG | RESEARCH AND DEVELOPMENT INTERN

Dec 2016 – Apr 2017 | Ditzingen, Germany

Design and implementation of time prediction algorithms for state-of-the-art laser cutting machines in Matlab. Independent execution of time studies on testing machines.

ROBOMOTION GMBH | WORKING STUDENT

Oct 2015 – Mar 2016 | Stuttgart, Germany

Offline programming of pick-and-place industrial robots.

ACHIEVEMENTS

- 2014 Full scholarship from the German National Academic Foundation (Studienstiftung).
- 2013 University scholarship of the University of Stuttgart together with the Vector GmbH.
- 2011 German champion in the "RoboCup Junior Soccer" competition as the team captain.

EXTRACURRICULAR ACTIVITIES

BOXT EURCH DURCH MÜNCHEN | YOUTH WORKER

December 2017 – today | Munich, Germany

Weekly homework assistance and after-school activities for disadvantaged youth.

INTERNATIONAL CENTER OF THE UNIVERSITY OF STUTTGART | MENTOR

Oct 2014 – Apr 2016 | Stuttgart, Germany

Personal mentor for incoming foreign students.

DONGSAVATH CHILDREN AND YOUTH DEVELOPMENT ASSOC. | VOLUNTEER

Oct 2012 – Aug 2013 | Vientiane, Laos

Conducting of diverse after-school activities for disadvantaged children in rural areas at four public primary schools.

QUALIFICATIONS AND SKILLS

Software and Programming Languages

★★★★	C++ with CUDA
★★★☆☆	Python with PyTorch/Tensorflow
★★★☆☆	Matlab with Simulink
★★★★	Git
★★★☆☆	ROS
★★★★	LaTeX
★★★☆☆	Linux

Spoken Languages

★★★★	German
★★★★	English
★★★☆☆	Spanish
★★★☆☆	Lao
★★☆☆☆	French
★★☆☆☆	Japanese

PERSONAL INTERESTS

- Avid martial artist. Active member of Budo club Ismaning practicing Aikido.
- Outdoor enthusiast. I love to hike, climb or get lost in the back country.
- Cooking delicious food with affinity for fermentation.

CODE AND WORK SAMPLES

- Github account at [www.github.com/j-petit](https://github.com/j-petit)
- Google Summer of Code work product at <https://github.com/ros-planning/moveit/issues/1427>

June 2020 | Leipzig, Germany