

Philip Neugebauer

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Education

Technical University Munich (TUM)

B.Sc. in CS, Minor: Electrical Engineering and Information Technology

Munich, Germany

Oct. 2017 - ongoing

M.Sc. in CS, Specialization areas: Computer Vision, Machine Learning, Robotics

Carnegie Mellon University (CMU)

Pittsburgh, USA

Visiting Researcher

Nov. 2022 - Apr. 2023

Awards and Honors

2022 - 2023	Scholarship: Grant for international research by DAAD (German Academic Exchange Service)	USA
2022	Hackathon: Finalist at HackZurich among 500+ participants	Switzerland
2022	Game jam: 2 nd Price + Award "Best Technical Implementation" at the Semester Game jam at TUM	Germany
2021	Hackathon: 1 st Place for a challenge at HackaTUM	Germany
2021 - 2021	Scholarship: Grant for a research Internship abroad by DAAD (German Academic Exchange Service)	USA
2021	Hackathon: 1 st Place for a challenge at HackCMU	USA
2016	Music Competition: 1 st Prize at Jugend Musiziert (federal level)	Germany
2015	Music Competition: 1 st Prize at European Competition for Young Soloists	Luxemburg
2012	Music Competition: 1 st Prize, Solo + Chamber Music, at Val Tidone Young Talent Competition	Italy

Experience

Visiting Researcher at NavLab at Carnegie Mellon University

Pittsburgh, USA

"Domain Adaptation by Revisiting Static Objects with a Transit Bus"

Nov. 2022 - Apr. 2023

• [Structure for Motion](#) • [Colmap](#) • [Computer Vision](#) • [Deep Learning](#) • [Python](#)

AI Engineer (Working Student) at Fugro

Remote

Cloud based detection and classification of marine mammal sounds using a neural network on time series data

Sep. 2022 - Nov. 2022

Team Lead and Agile Coach of a group of 4

• [Time Series Analysis](#) • [Cloud Computing](#) • [Computer Vision](#) • [PyTorch](#) • [Python](#)

AI Engineer at Digital Product School by UnternehmerTUM

Munich, Germany

Developed a hybrid VR conferencing solution using user-centered, lean and agile methods

May 2022 - Jul. 2022

• [Virtual Reality](#) • [Web Development](#) • [Interdisciplinary Collaboration](#)

Research Intern at NavLab at Carnegie Mellon University

Pittsburgh, USA

Bus stop detection by tracking people entering or leaving a bus, using cameras mounted on the bus

Aug. 2021 - Oct. 2021

• [Detectron2](#) • [Computer Vision](#) • [Deep Learning](#) • [Artificial Intelligence](#) • [Python](#)

Student Research Assistant at the Max-Planck-Institute for Iron Research

Düsseldorf, Germany

Virtual Reality Visualization of Molecular Dynamics Simulations of 3D Atom Trajectories

Jul. 2017 - Oct. 2021

• [Virtual Reality](#) • [C#](#) • [Unity](#) • [Python](#)

Major Projects

Vehicle to Vehicle Communication

Practical Course at FORTISS

Built a framework to let devices communicate, showcased with a Raspberry Pi controlled car

Oct. 2020 - May 2022

• [Python](#) • [ROS](#) • [C++](#) • [Embedded Systems](#) • [Telecommunication](#) • [Jira](#)

Teleoperation of a Humanoid Robot with a Virtual Reality (VR) Headset

Practical course at Devanthro

Developed the User Interface and integrated data transfer for operating the robot Roboy remotely in VR

Oct. 2019 - Mar. 2021

Team Lead and Agile Coach of a group of 3 during the second semester

• [Virtual Reality](#) • [Unity](#) • [C#](#) • [ROS](#) • [Python](#) • [Telecommunication](#) • [Android](#)

Face Reconstruction

Course at TUM

3D Face Model Reconstruction from a single 2D image and expression transfer between 2 images

May. - Aug. 2021

• [C++](#) • [Computer Vision](#) • [OpenCV](#) • [Deep Learning](#) • [Eigen](#) • [Ceres](#)

Technical Skills

Programming

Python, C#, Java, C++, C, Matlab

Software Development Tools

Git, Unity, PyTorch, ROS/ROS2, Detectron2, Docker, Android Studio, React

Languages

German, English