Yue **Chen**

PHD CANDIDATE APPLICANT

Schwaigstr. 11, 85221, Dachau, Germany

(+49) 1522-2030664 | yue-c@hotmail.com | yuechengithub.github.io | YueChenGithub | yue-c

Education

Technical University of Munich   *Munich, Germany*

M.Sc. in Robotics, Cognition, Intelligence, Grade 1.8/1.0   *Oct. 2021 - Nov. 2023*

Technical University of Munich   *Munich, Germany*

B.Sc. in Mechanical Engineering, Grade 2.5/1.0   *Oct. 2017 - Sep. 2021*

Research Experience

Neural Inverse Rendering   *Munich, Germany*

Visual Computing & Artificial Intelligence Lab, TUM   *Feb.2023 - Nov. 2023*

- Implement a differentiable path tracer to decompose NeRF scenes, distinguished by more accurate material and more realistic shading.
- Create synthetic datasets from Blender for an in-depth evaluation of model performance.

Images Relighting and Material Editing   *Munich, Germany*

Visual Computing & Artificial Intelligence Lab, TUM   *Apr. 2022 - Sep. 2022*

- Lead a three-student team in applying ray tracing for light visibility estimation in the NeRF relighting task, reducing computation time from 150+ hours to 5 minutes.

3D Visual Grounding   *Munich, Germany*

Visual Computing & Artificial Intelligence Lab, TUM   *Sep. 2021 - Mar. 2022*

- Incorporate graph neural networks and NLP to model the spatial relationships among object proposals, generating surrounding-aware features.

Graph Neural Networks for Gear Transmission Development   *Munich, Germany*

Chair of Machine Elements, TUM   *Mar. 2021 - Sep. 2021*

- Employ graph neural networks to understand and predict the relationships between components of gear transmissions.

Physics-Informed Machine Learning for Rogue Wave Prediction   *Munich, Germany*

Associate Professorship of Thermo-Fluid Dynamics, TUM   *Oct. 2020 - Feb. 2021*

- Demonstrate the potential of neural networks in solving challenging numerical problems.

Extracurricular Activity

Teaching Assistance Mathematics   *Munich, Germany*

Preliminary Course in Higher Mathematics, TUM   *Sep. 2018 - Nov. 2018*

Student Assistance   *Munich, Germany*

TUM Open Doors Day   *Oct. 2017*

Manufacturing Intern   *Hamburg, Germany*

MES Marine Engine Service GmbH   *Jun. 2027 - Oct. 2027*

Student Leader   *Macao, China*

Shiu Pong College House Association, University of Macao   *Aug. 2015 - Dec. 2015*

- Organize events to inform students about university policies and beneficial programs.

Skills

Programming	Python *(proficient)*, C++ *(intermediate)*, MATLAB *(intermediate)*, HTML *(intermediate)*
Tools	PyTorch, TensorFlow, Blender, Mitsuba, CATIA, Gurobi, LaTeX, Git, Linux
Languages	Chinese *(native)*, Cantonese *(native)*, English *(C1)*, German *(C1)*
Hobbies	Skiing *(50+ Days)*, Snowboard *(Beginner)*, Basketball *(PF/SF)*, Photography *(10+ Years)*