

# CAO Anh Quan, Ph.D. Student

✉ [anh-quan.cao@inria.fr](mailto:anh-quan.cao@inria.fr)

🐦 @AnhQuanCAO

🌐 <https://anhquancao.github.io/>

🌐 <https://www.linkedin.com/in/anh-quan-cao-558a95bb/>



## Education

- 2021 – Now     **Ph.D., Inria/PSL Research University** in Computer Vision  
Thesis: Unsupervised 3D scene understanding from image
- 2019 – 2020     **M.Sc., Ecole Polytechnique** in Artificial Intelligence and Advanced Visual Computing  
GPA: 3.99/4.0 (16.9/20) – rank (1 or 2)/10
- 2018 – 2019     **M.Sc., Telecom Paris/University Paris-Saclay** in Data Science  
GPA: 4.0/4.0 (17.1/20) – rank 1/30 (coursework), with honors
- 2017 – 2018     **Master 1, University of Science and Technology of Hanoi** in Computer Science  
GPA: 15.40/20 – rank 1/20
- 2013 – 2016     **B.Sc., University of Science and Technology of Hanoi** in Computer Science  
GPA: 16.1/20 – rank 1/40, with honors

## Working experiences

- 9/2022 – Now     Visiting Ph.D. Student. **Technical University of Munich (TUM)**  
Topic: Uncertainty estimation in 3D scene understanding  
Supervisor: Raoul de Charette, Angela Dai
- 2021 – Now     Ph.D. Student. **Inria, Paris**  
Thesis: Unsupervised 3D scene understanding from image  
Supervisor: Raoul de Charette
- Summer 2020     Research Intern. **Valeo.ai**  
Topic: Cross-attention for partial point cloud registration  
Supervisors: Gilles Puy, Alexandre Boulch, Renaud Marlet
- Summer 2019     Research Intern. **Safran**  
Topic: Analyze multivariate time series on sensor data of the helicopter engines  
Supervisors: Sin-seok Seo and Dohy Hong
- Mar 2014 – May 2018     Co-founder **Color me** (<http://colorme.vn>) - KEE education company  
Lead team of developers, develop ERP and online learning system.  
Teach several design courses
- Summer 2016     Research Intern. **LIPN, CNRS**  
Speed up the distributed EM algorithm using Locality Sensitive Hashing  
Supervisor: Mustapha Lebbah

## Publications

- BMVC 2022     **Class-Prototypes for Contrastive Learning in Weakly-Supervised 3D Point Cloud Segmentation**  
Project page: <https://github.com/cv-rits/COARSE3D>  
Rong Li, Anh-Quan Cao, and Raoul de Charette
- CVPR 2022     **MonoScene: Monocular 3D Semantic Scene Completion**  
Project page: <https://cv-rits.github.io/MonoScene>  
Anh-Quan Cao and Raoul de Charette

## Publications (continued)

- ICCV 2021     **PCAM: Product of Cross-Attention Matrices for Rigid Registration of Point Clouds**  
Project page: <https://github.com/valeoai/PCAM>  
Anh-Quan Cao, Gilles Puy, Alexandre Boulch and Renaud Marlet

## Other research activities




- 2022     **Co-supervisor** of MSc. student: Rong Li  
**Vision and Sports Summer School.** Prague, Czech Republic, <http://cmp.felk.cvut.cz/summerschool2022/index.html>  
**Guest Lecturer** on 3D deep learning, MaSSP 2022 summer school (<https://en.masspvn.com/>)  
**Reviewer**, WACV 2023
- 2021     **PRAIRIE AI summer school.** Online, <https://project.inria.fr/paiss/>

## Scholarship / awards




- 2019     **Master scholarship**, 100% tuition fee and living expense from Google, Inria and Ecole Polytechnique
- 2017     **Erasmus Mundus Exchange Scholarship**, Université Sorbonne Paris Nord.
- 2016     **Top 5 Startup with colorme.vn**, Kawaii Bussiness Startup Competition - Japanese Embassy in Vietnam  
**Research Internship Prize**, funding for student with the highest GPA to do internship in France, University of Science and Technology of Hanoi
- 2013 – 2016     **Scholarship for outstanding student**, University of Science and Technology of Hanoi

## References




### Dr. Raoul de Charette

 Researcher at Inria  
 <https://cv-rits.github.io/>  
 [raoul.de-charette@inria.fr](mailto:raoul.de-charette@inria.fr)




### Prof. Angela Dai

 Assistant professor at TUM  
 <https://www.3dunderstanding.org/>  
 [angela.dai@tum.de](mailto:angela.dai@tum.de)

### Dr. Gilles Puy

 Research scientist at Valeo.ai  
 <https://sites.google.com/site/puygilles>  
 [gilles.puy@valeo.com](mailto:gilles.puy@valeo.com)

### Prof. Renaud Marlet

 Senior researcher at ENPC  
 <http://imagine.enpc.fr/~marletr/>  
 [renaud.marlet@enpc.fr](mailto:renaud.marlet@enpc.fr)