Van-Quang Nguyen

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SUMMARY

Senior Researcher & PhD with 900+ citations and a track record of delivering SOTA multimodal systems; having won the ECCV'20 Challenge (organized by AllenAI/Google) and developed GRIT (ECCV'22) that outperformed Google team's using 1000x less training data. Deep expertise in LLMs and MLLMs for vision-language understanding, safety-critical AI applications, and agentic agents.

WORK EXPERIENCES

1. **Visiting Researcher** — January 2026 - Now
   Computer Vision Lab, Tohoku University, Japan
2. **Postdoctoral Researcher** — Nov 2022 - Dec 2025
   RIKEN Center for Artificial Intelligence Project (RIKEN AIP), Japan
3. **Machine Learning Research Intern** — Aug 2020 – Oct 2020
   Preferred Networks Inc. (the largest AI Unicorn in Japan)
4. **Machine Learning Engineer, Part-time** — Mar - Oct 2018
   Laboro.AI Inc. (listed in Japan, approx. $100M valuation)
5. **Machine Learning Research Intern** — Jul - Aug 2017
   Incubation Center of Fujitsu, Japan

EDUCATION

1. **Ph.D. in Information Sciences and Data Science** — Oct 2019 - Oct 2022
   Tohoku University[0] | Dean's Award — Supervisor: Prof. Takayuki Okatani
2. **Master in Information Sciences and Data Science** — Oct 2017 - Oct 2019
   Tohoku University — GPA: 4.0/4.0
3. **Bachelor in Computer Science** — Oct 2012 - Oct 2017
   Vietnam National University (VNU-UET) | highest GPA — GPA: 3.88/4.0
4. **Exchange Student in Fostering ASEAN Future Leaders Program** — Sep 2015 - Aug 2016
   Daejeon University and KAIST, South Korea — GPA: 4.4/4.5

SELECTED PUBLICATIONS

My research publications have received **900+ citations**; see my Google Scholar profile for full publications.

1. Huyen Tran, **Van-Quang Nguyen**, Farros Alferro, Kang-Jun Liu, Takayuki Okatani "360° Image Perception with MLLMs: A Comprehensive Benchmark and a Training-Free Method," submitted to **CVPR 2026** (2 weak Accepts and 1 weak Reject), resubmited to **ECCV 2026**.
2. **Van-Quang Nguyen** and Takayuki Okatani, "CoReTab: Improving Multimodal Table Understanding with Code-driven Reasoning," **EACL 2026** (oral presentation).
3. Kittitouch Areerob, **Van-Quang Nguyen**, Xianfeng Li, Shogo Inadomi, Toru Shimada, Hiroyuki Kanasaki, Zhijie Wang, Masanori Suganuma, Keiji Nagatani, Pang-jo Chun, Takayuki Okatani, "Multimodal artificial intelligence approaches using large language models for expert-level landslide image analysis," Computer-Aided Civil and Infrastructure Engineering **CACIE 2025** (**Q1 journal**).
4. Korawat Charoenpitaks*, **Van-Quang Nguyen***, Masanori Suganuma, Kentaro Arai, Seiji Totsuka, Hiroshi Ino, Takayuki Okatani, "TB-Bench: Training and Testing Multi-Modal AI for Understanding Spatio-Temporal Traffic Behaviors from Dashcam Images/Videos," , Workshop on Autonomous Driving, **CVPR 2025**.

[0] ♠ Tohoku University has been ranked **No. 1 in Japan** for five consecutive years, according to THE rankings.

5. Korawat Charoenpitaks, **Van-Quang Nguyen**, Masanori Suganuma, Masahiro Takahashi, Ryoma Niihara, Takayuki Okatani, "Exploring the Potential of Multi-Modal AI for Driving Hazard Prediction," IEEE Transactions on Intelligent Vehicles, **TIV 2024** (**Q1 journal**).
6. **Van-Quang Nguyen**, Masanori Suganuma, Takayuki Okatani, "GRIT: Faster and Better Image captioning Transformer Using Dual Visual Features," European Conference on Computer Vision, **ECCV 2022**.
7. **Van-Quang Nguyen**, Masanori Suganuma, Takayuki Okatani, "Look Wide and Interpret Twice: Improving Performance on Interactive Instruction-following Tasks," International Joint Conferences on Artificial Intelligence, **IJCAI 2021**.
8. **Van-Quang Nguyen**, Masanori Suganuma, Takayuki Okatani, "Efficient Attention Mechanism for Visual Dialog that can Handle All the Interactions between Multiple Inputs," European Conference on Computer Vision, **ECCV 2020**.
9. **Van-Quang Nguyen**, Jinhee Chun, Takeshi Tokuyama, "CapsuleNet for micro-expression recognition," IEEE International Conference on Automatic Face & Gesture Recognition, **FG 2019**.
10. **Van-Quang Nguyen**, Hiromasa Fujihara, "Revisiting a single-stage method for face detection," IEEE International Conference on Automatic Face & Gesture Recognition, **FG 2019**.

TECHNICAL SKILLS

Programming Languages and Tools: Python, SQL, C/C++, Git/Github, Bash/Linux, Docker
LLM & Agentic frameworks: LangChain, LlamaIndex, CrewAI, OpenAI/Anthropic SDKs, vllm, Unsloth, trl
ML & Data: Pytorch, Transformers, Pandas, Numpy, MLflow, FastAPI

ACADEMIC ACTIVITIES

Mentoring: 4 PhD/Master/Bachelor students at Tohoku University and VNU

Reviewing: CVPR, ICCV, ECCV, NeurIPS, IJCV, IEEE Trans. Multimedia, Advanced Robotics.

Teaching: Lecturer for Data Science courses (Tohoku, 2019–2020).

Talks: VNU 2022; AI Forum 2023 (VIASM); University of Melbourne & University of Sydney, 2025.

SELECTED AWARDS

1. Dean's Award for Excellent Achievements at Tohoku University — 2023
2. Best Presentation Award for Ph.D. research at Tohoku University — 2022
3. Winner of Alfred Challenge organized by teams at AllenAI and Google — ECCV 2020
4. Japanese Government Scholarship (MEXT) for Ph.D. Course — 2019 - 2022
5. Honda Young Engineer Scientist Award Plus Ph.D. Fellowship — 2019
6. Japanese Government Scholarship (MEXT) for Master Course — 2017 - 2019
7. Honda Young Engineer Scientist Award for top 10 engineering students in Vietnam — 2017
8. Data Science Summer School Scholarship, Gottingen University — 2018
9. Machine Learning Summer School Scholarship, Kyoto University — 2015
10. Excellent Student Award (highest GPA among 500+ K57 cohort students), VNU-UET — 2017
11. Excellent Thesis Award (scored 10/10), VNU-UET — 2017
12. First Prize of Scientific Student Research Conference, VNU-UET — 2017
13. AmCham Scholarship, American Chamber and the US Embassy — 2017