**TOAN NGUYEN**

[https://www.linkedin.com/in/NgToanRob/](https://www.linkedin.com/in/ngtoanrob/" \o "https://www.linkedin.com/in/ngtoanrob/)| [https://github.com/NgToanRob](https://github.com/NgToanRob" \o "https://github.com/NgToanRob)

nguyentoan10601@gmail.com| Saint Petersburg, Russia

Tel: (RU) +7 928 466 1384, (VN) +84 333 475 243

See more in [https://ngtoanrob.github.io](https://ngtoanrob.github.io/" \o "https://ngtoanrob.github.io/)

**About me:** A Robotics and AI student at ITMO University, one of Russia’s top institutions, with a strong foundation in theoretical mechanics and artificial intelligence. As a National Physics Olympiad medalist, I understand how physics empowers robotic systems, bridging analytical precision with AI-driven adaptability. My passion lies in developing intelligent, physically grounded robots that seamlessly interact with the real world.

**SKILLS**

* Proficiency in programming languages: Python, Matlab, Java
* Knowledge of robot kinematics and dynamics
* Control theory: Linear and Non-linear control, Adaptive and Robust control
* Experience with ROS framework and Linux
* Understanding of AI principles, knowledge of Machine learning, Deep learning in NLP and CV

**PERSONAL PROJECTS**

|  |  |
| --- | --- |
| **OMNI Car** | **07/2024** |
| * **GitHub:** <https://gitlab.com/NgToanRob/yandex-robotics-final-solution> * **Descriptions**: Developed and deployed a ROS-based project on real hardware for the final stage of the Yandex Robotics Olympiad. * **Tech stack:** ROS, Python, C++ | |
| **Implement Video vision transformer** | **12/2022** |
| * **GitHub:** <https://github.com/NgToanRob/ViVit-a-Pytorch-implementation> * **Descriptions:** Using ViViT model to solve challenge liveness detection in Zalo AI contest in 2022. * **Tasks in the team:** Research the theory of ViViT architecture, model optimization methods such as Stochastic depth, Random augment, Label smoothing * **Tech stack:** Pytorch | |
| **Implement from scratch YOLO** | **12/2022** |
| * **GitHub:** <https://github.com/NgToanRob/Yolov1-pytorch-implement> * **Descriptions:** Implement YOLO model from scratch using Pytorch * **Tech stack:** Pytorch | |
| **Build a python completed app server** | **08/2022** |
| * **GitHub:** <https://github.com/NgToanRob/Django-AppServer> * **Descriptions:** Free some APIs to manage data from drone with restfull api on Django framework. Using PostgreSQL to make database and caching data on redis. Deploy to a Linux server using nginx. Use docker compose to compact the process. * **Tech stack:** Django, PostgreSQL, Redis, Docker, Docker compose | |

**ACTIVITIES AND WARDS**

|  |  |  |
| --- | --- | --- |
| * **Gold medal in the Russian Federal Student Robotics Olympiad, organized by Yandex** | | **07/2024** |
| * **Third prize in the competition: Vietnam National Excellent Student in Physics** | **02/2019** | |

**EDUCATION**

|  |  |  |
| --- | --- | --- |
| **Saint Petersburg** | [**ITMO University**](https://en.itmo.ru/) | **10/2021 – Now** |
| * Major: **Robotics and Artificial Intelligence** * Fully Scholarship | | |
| **Ho Chi Minh City** | [**Ho Chi Minh City University of Technology**](https://hcmut.edu.vn/) | **9/2020 –04/2021** |
| * Major: **Mechatronics** * **Top 4** GPA of mechanical engineering faculty | | |