

Personal Detail

Education

Vladimir Tchuiev

International 50/7, Haifa, Israel
Date of Birth: 17/04/1988
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Profile page: <https://vova-profile.vercel.app/>

Significant Past Work Experience

- 2021-present
Research Scientist at Bosch Center for Artificial Intelligence
Robotics, Computer Vision, LLMs, VLMs, Extreme Quantization
- 2018-2020
TA of Aircraft Design and Manufacturing course
- 2014-2016
TA of Automatic Aircraft Control course
- 2007-2010
Military service at the IDF Airforce, aircraft technician

Skills

- Python (including PyTorch)
- TypeScript (next.js)
- C++
- Matlab
- 3D Modeling
- Photoshop

Language proficiencies

	Hebrew	Native
	English	High Professional
	Russian	Good
	Spanish	Medium
	German	Basic-Medium
	Chinese (Mandarin, Simplified)	Basic

- 2017-2021
PhD under Prof. Vadim Indelman
Aerospace Engineering
Technion Israel Institute of Technology
Thesis: Autonomous Navigation Under Uncertainty (SLAM, Machine Learning, Robotics)
Average: 92

- 2014-2017
MSc under Prof. Tal Shima
Aerospace Engineering
Technion Israel Institute of Technology
Thesis: Intercept Angle Guidance Under Obstacle Rich Environment (Control Theory, Guidance, motion planning)
Average: 90.7

- 2010-2014
BSc in Aerospace Engineering
Technion Israel Institute of Technology
Average: 89.4

- 2003-2006
High school diploma with a focus on electronics, Ort Horowitz, Karmiel, Israel.

Projects

[see profile page for links](#)

- MCTS attention-based Chess bot
Part of Bosch ECCV 2022 presentation booth
- Neural music tokenization and generation
- TRM Diffusion Language Model
- RippleNet neurons

Interests

- Large language models
- Computer vision
- Robotics
- Diffusion models
- Music generation
- Web development
- AI for gaming
- SLAM
- Semantic perception
- Autonomous navigation
- Motion planning
- Concept art

Ghoummaid, Marah, **Vladimir Tchuiev**, Ofek Glick, Michal Moschkovitz, and Dotan Di Castro.

"MATCH: Task-Driven Code Evaluation through Contrastive Learning." *arXiv preprint arXiv:2510.23169* (2025). (accepted to EMNLP Findings)

Joglekar, Omkar, Shir Kozlovsky, Tal Lancewicki, **Vladimir Tchuiev**, Zohar Feldman, and Dotan Di Castro.

"Towards natural language-driven industrial assembly using foundation models." In *ICLR 2024 Workshop on Large Language Model (LLM) Agents*. 2024.

Cohen, Noa, Omkar Joglekar, Dotan Di Castro, **Vladimir Tchuiev**, Shir Kozlovsky, and Michal Moshkovitz.

"Gradient-Free Training of Quantized Neural Networks." *arXiv e-prints* (2024): arXiv-2410.

Tchuiev, Vladimir, and Vadim Indelman.

"Epistemic uncertainty aware semantic localization and mapping for inference and belief space planning." *Artificial Intelligence* 319 (2023): 103903.

Tchuiev, Vladimir, Yakov Miron, and Dotan Di Castro.

"Duqim-net: Probabilistic object hierarchy representation for multi-view manipulation." In *2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, pp. 10470-10477. IEEE, 2022.

Spector, Oren, **Vladimir Tchuiev**, and Dotan Di Castro.

"InsertionNet 2.0: Minimal contact multi-step insertion using multimodal multiview sensory input." In *2022 International Conference on Robotics and Automation (ICRA)*, pp. 6330-6336. IEEE, 2022.

Tchuiev, Vladimir, and Vadim Indelman.

"Distributed consistent multi-robot semantic localization and mapping." *IEEE Robotics and Automation Letters* 5, no. 3 (2020): 4649-4656.

Tchuiev, Vladimir, Yuri Feldman, and Vadim Indelman.

"Data association aware semantic mapping and localization via a viewpoint-dependent classifier model." In *2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, pp. 7742-7749. IEEE, 2019.

Tchuiev, Vladimir, and Vadim Indelman.

"Inference over distribution of posterior class probabilities for reliable bayesian classification and object-level perception." IEEE Robotics and Automation Letters 3, no. 4 (2018): 4329-4336.

Tchuiev, Vladimir, and Tal Shima.

"Intercept angle guidance in an obstacle-rich environment." Journal of Guidance, Control, and Dynamics 40, no. 6 (2017): 1507-1518.