Jindřiška Deckerová

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EDUCATION

2021 - PRESENT	**Faculty of Electrical Engineering, Czech Technical University in Prague** DOCTORAL STUDIES ｜Informatics ｜Topic: *Dynamic robotic routing problems*
2018 - 2021	**Faculty of Electrical Engineering, Czech Technical University in Prague** MASTER'S DEGREE ｜Open Informatics, Artificial Inteligence ｜Thesis: *Generalized Routing Problems with Continuous Neighborhoods*
2019 - 2020	**Escola Politècnica Superior d'Enginyeria de Vilanova i la Geltrú, Universitat Politècnica de Catalunya** Erasmus+ program
2015 - 2018	**Faculty of Electrical Engineering, Czech Technical University in Prague** BACHELOR'S DEGREE ｜Open Informatics, Software Systems ｜Thesis: *Artificial Neural Networks in Solution of the Orienteering Problems*

EXPERIENCE

2021 - PRESENT	RESEARCHER ｜**Computational Robotics Laboratory** within Artificial Inteligence Center, Faculty of Electrical Engineering, Czech Technical University in Prague
2018 - 2021	INTERN ｜**Computational Robotics Laboratory** within Artificial Inteligence Center, Faculty of Electrical Engineering, Czech Technical University in Prague

COMMUNITY SERVICE

- Workshop organizator at Became a scientist for a day within the International Day of Women in Science ｜2023
- Member of organization committee of Student Conference on Planning in Artificial Intelligence and Robotics (PAIR) ｜2022
- Member of organization committee of International Workshop on Self-Organizing Maps and Learning Vector Quantization, Clustering and Data Visualization (WSOM+ 2022) ｜2022
- Speaker and workshop organizator at Became a scientist for a day within the International Day of Women in Science ｜2022
- PR Manager of Open Informatics study program ｜2021 - 2023
- Member of Academic Senate of Faculty of Electrical Engineering, Czech Teaching University in Prague ｜2019 - 2021

AWARDS AND COMPETITIONS

2021	**Winner of the IT SPY**- the best master thesis in the field of informatics and information technology in Czechia and Slovakia
2021	**Dean's award for the best diploma thesis**
2021	Member of **the 3nd placed team at Aviation ISAC-Collegiate CTF Competition**
2020	Member of **the 2nd placed team at Aviation ISAC-Collegiate CTF Competition**

Teaching Activities

Instructor	Programming in C ǀ 2019 - PRESENT
	Procedural Programming ǀ 2021 - PRESENT
	Artificial Inteligence in Robotics ǀ 2021 - PRESENT
Student supervision	Master student ǀ 2022 - 2023
	Topic: *Lower Bound Estimates for Path Planning in Environment with Obstacles*

Publications

1. **Deckerová, J.**, Váňa P., & Faigl, J., *Combinatorial Lower Bounds for the Generalized Traveling Salesman Problem with Neighborhoods.* Expert Systems with Applications, 2023, **In review**.

2. **Deckerová, J.**, Kučerová K., & Faigl, J., *On Improvement Heuristic to Solutions of the Close Enough Traveling Salesman Problem in Environments with Obstacles.* European Conference on Motion Robots (ECMR), 2023, **Accepted for publication**.

3. **Deckerová, J.**, Krátký, V. & Faigl, J., *Traveling Salesman Problem with Neighborhoods on a Sphere in Reflectance Transformation Imaging Scenarios.* Expert Systems with Applications, 198116814, 2022.

4. **Deckerová, J.** & Faigl, J., *Hopfield Neural Network in Solution of the Close Enough Orienteering Problem.* In Proceedings of the 20th Conference Information Technologies - Applications and Theory (pp. 169-175), 2020.

5. Faigl, J., Váňa, P. & **Deckerová, J.**, *Fast heuristics for the 3-D multi-goal path planning based on the generalized traveling salesman problem with neighborhoods.* IEEE Robotics and Automation Letters, 4(3) (pp. 2439-2446), 2019.

6. Faigl, J. & **Deckerová, J.**, *On Unsupervised Learning based Multi-Goal Path Planning for Visiting 3D Regions.* In Proceedings of the 2018 4th International Conference on Robotics and Artificial Intelligence (pp. 45-50), 2018.

Media presence

- **Jindřiška Deckerová: Science popularization, robots, and drons**, *PAiONERRS TALKS podcast*, `https://open.spotify.com/episode/3iZ96Gss1dPHtcl2d80FSe?si=1ac61e1207844292`

- **To ladies you don't need to explain it**, *Hospodářské noviny*, `https://archiv.hn.cz/c1-67114590-damam-to-nemusite-vysvetlovat-vickrat`

- **Jindřiška Deckerová: She teaches robots to find the best way, has an award for a technical diploma thesis and inspires other girls**, *Heroine.cz*, `https://www.heroine.cz/zeny-it/8853-uci-roboty-hledat-nejlepsi-cestu-jindriska-deckerova-ma-cenu-za-technickou-diplomovou-praci-a-i`

- **Jindřiška Deckerová: Cakes and tears are part of programming**, *Novinky.cz, Právo*, `https://www.novinky.cz/zena/styl/clanek/jindriska-deckerova-k-programovani-patri-i-dorty-a-slzy-40396`

- **Jindřiška Deckerová: The best diploma thesis in Informatics**, *Studio Víkend ČT*, `https://www.ceskatelevize.cz/porady/10101491767-studio-ct24/221411058250702/`

Skills

Programming languages	C, C++, Julia, Python, Java, MATLBAB
Languages	**Czech**: Mother Tongue ǀ **English**: C1 certificate ǀ **German**: Basic ǀ **Spanish**: Basic
Soft skills	Fast learning ǀ Creative

Other

Podcast host	věda bez cenzury - Scientific podcast about PhD, academia, science, and life `https://open.spotify.com/show/0RALXyXqLX2lOWcEzm48EC?si=335127ee61c64dd1`