



## DAFTAR PUSTAKA

- [1] A. Ataka, T. Abrar, F. Putzu, H. Godaba, and K. Althoefer, “Model-Based Pose Control of Inflatable Eversion Robot With Variable Stiffness,” *IEEE Robotics and Automation Letters*, vol. 5, no. 2, pp. 3398–3405, Apr. 2020. [Online]. Available: <https://ieeexplore.ieee.org/document/9013054/>
- [2] A. M. Kübler, S. U. Rivera, F. B. Raphael, J. Förster, R. Siegwart, and A. M. Okamura, “A Multi-Segment, Soft Growing Robot with Selective Steering,” in *2023 IEEE International Conference on Soft Robotics (RoboSoft)*. Singapore, Singapore: IEEE, Apr. 2023, pp. 1–7. [Online]. Available: <https://ieeexplore.ieee.org/document/10122091/>
- [3] “Markov Decision Processes (MDPs) - Structuring a Reinforcement Learning Problem.” [Online]. Available: <https://deeplizard.com/learn/video/my207WNoeyA>
- [4] D. Li, S. Xu, and P. Li, “Deep Reinforcement Learning-Empowered Resource Allocation for Mobile Edge Computing in Cellular V2X Networks,” *Sensors*, vol. 21, no. 2, p. 372, Jan. 2021. [Online]. Available: <https://www.mdpi.com/1424-8220/21/2/372>
- [5] X. Ruan, D. Ren, X. Zhu, and J. Huang, “Mobile Robot Navigation based on Deep Reinforcement Learning,” in *2019 Chinese Control And Decision Conference (CCDC)*. Nanchang, China: IEEE, Jun. 2019, pp. 6174–6178. [Online]. Available: <https://ieeexplore.ieee.org/document/8832393/>
- [6] M. Cianchetti, T. Ranzani, G. Gerboni, T. Nanayakkara, K. Althoefer, P. Dasgupta, and A. Menciassi, “Soft Robotics Technologies to Address Shortcomings in Today’s Minimally Invasive Surgery: The STIFF-FLOP Approach,” *Soft Robotics*, vol. 1, no. 2, pp. 122–131, Jun. 2014. [Online]. Available: <https://www.liebertpub.com/doi/10.1089/soro.2014.0001>
- [7] G. Brantner and O. Khatib, “Controlling Ocean One: Human–robot collaboration for deep-sea manipulation,” *Journal of Field Robotics*, vol. 38, no. 1, pp. 28–51, Jan. 2021. [Online]. Available: <https://onlinelibrary.wiley.com/doi/10.1002/rob.21960>
- [8] B. S. Homberg, R. K. Katschmann, M. R. Dogar, and D. Rus, “Robust proprioceptive grasping with a soft robot hand,” *Autonomous Robots*, vol. 43, no. 3, pp. 681–696, Mar. 2019. [Online]. Available: <http://link.springer.com/10.1007/s10514-018-9754-1>
- [9] H. El-Hussieny and I. A. Hameed, “Obstacle-Aware Navigation of Soft Growing Robots via Deep Reinforcement Learning,” *IEEE Access*, vol. 12, pp. 38 192–38 201, 2024. [Online]. Available: <https://ieeexplore.ieee.org/document/10464303/>
- [10] T. Abrar, F. Putzu, A. Ataka, H. Godaba, and K. Althoefer, “Highly Manoeuvrable Eversion Robot Based on Fusion of Function with Structure,” in *2021 IEEE International Conference on Robotics and Automation (ICRA)*. Xi’an, China: IEEE, May 2021, pp. 12 089–12 096. [Online]. Available: <https://ieeexplore.ieee.org/document/9561873/>



- [11] A. Ataka and A. P. Sandiwan, "Growing Robot Navigation Based on Deep Reinforcement Learning," in *2023 9th International Conference on Control, Automation and Robotics (ICCAR)*. Beijing, China: IEEE, Apr. 2023, pp. 115–120. [Online]. Available: <https://ieeexplore.ieee.org/document/10151740/>
- [12] K. Lau, Y. Hu, Y. Leung, C. Poon, P. Chiu, J. Lau, and Y. Yam, "Design and Development of a Task Specific Robot for Endoscopic Submucosal Dissection of Early Gastrointestinal Cancers," in *2014 International Symposium on Optomechatronic Technologies*. Seattle, WA: IEEE, Nov. 2014, pp. 210–214. [Online]. Available: <http://ieeexplore.ieee.org/document/7119421/>
- [13] H. Premachandra, H. Herath, K. Thathsarana, D. Liyanage, Y. Amarasinghe, D. Madusanka, and M. Jayawardane, "Design and Development of a Robotic Uterine Manipulator for Gynecological Laparoscopy," in *2022 8th International Conference on Control, Automation and Robotics (ICCAR)*. Xiamen, China: IEEE, Apr. 2022, pp. 145–154. [Online]. Available: <https://ieeexplore.ieee.org/document/9782616/>
- [14] P. Slade, A. Gruebele, Z. Hammond, M. Raitor, A. M. Okamura, and E. W. Hawkes, "Design of a soft catheter for low-force and constrained surgery," in *2017 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. Vancouver, BC: IEEE, Sep. 2017, pp. 174–180. [Online]. Available: <http://ieeexplore.ieee.org/document/8202154/>
- [15] L. Behnke, B. H. Do, S. Eristoff, and R. Kramer-Bottiglio, "Interaction Behaviors of a Vine Robot in a Pipe T-Junction," in *2024 IEEE 7th International Conference on Soft Robotics (RoboSoft)*. San Diego, CA, USA: IEEE, Apr. 2024, pp. 498–503. [Online]. Available: <https://ieeexplore.ieee.org/document/10522034/>
- [16] L. H. Blumenschein, M. Koehler, N. S. Usevitch, E. W. Hawkes, D. C. Rucker, and A. M. Okamura, "Geometric Solutions for General Actuator Routing on Inflated-Beam Soft Growing Robots," *IEEE Transactions on Robotics*, vol. 38, no. 3, pp. 1820–1840, Jun. 2022. [Online]. Available: <https://ieeexplore.ieee.org/document/9583670/>
- [17] D. A. Haggerty, N. D. Naclerio, and E. W. Hawkes, "Characterizing Environmental Interactions for Soft Growing Robots," in *2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. Macau, China: IEEE, Nov. 2019, pp. 3335–3342. [Online]. Available: <https://ieeexplore.ieee.org/document/8968137/>
- [18] J. D. Greer, L. H. Blumenschein, A. M. Okamura, and E. W. Hawkes, "Obstacle-Aided Navigation of a Soft Growing Robot," in *2018 IEEE International Conference on Robotics and Automation (ICRA)*. Brisbane, QLD: IEEE, May 2018, pp. 4165–4172. [Online]. Available: <https://ieeexplore.ieee.org/document/8460777/>
- [19] N. D. Naclerio and E. W. Hawkes, "Simple, Low-Hysteresis, Foldable, Fabric Pneumatic Artificial Muscle," *IEEE Robotics and Automation Letters*, vol. 5, no. 2, pp. 3406–3413, Apr. 2020. [Online]. Available: <https://ieeexplore.ieee.org/document/9013028/>



- [20] J. D. Greer, T. K. Morimoto, A. M. Okamura, and E. W. Hawkes, “Series pneumatic artificial muscles (sPAMs) and application to a soft continuum robot,” in *2017 IEEE International Conference on Robotics and Automation (ICRA)*. Singapore, Singapore: IEEE, May 2017, pp. 5503–5510. [Online]. Available: <http://ieeexplore.ieee.org/document/7989648/>
- [21] —, “A Soft, Steerable Continuum Robot That Grows via Tip Extension,” *Soft Robotics*, vol. 6, no. 1, pp. 95–108, Feb. 2019. [Online]. Available: <https://www.liebertpub.com/doi/10.1089/soro.2018.0034>
- [22] C. Watson, R. Obregon, and T. K. Morimoto, “Closed-Loop Position Control for Growing Robots Via Online Jacobian Corrections,” *IEEE Robotics and Automation Letters*, vol. 6, no. 4, pp. 6820–6827, Oct. 2021. [Online]. Available: <https://ieeexplore.ieee.org/document/9478263/>
- [23] M. Selvaggio, L. A. Ramirez, N. D. Naclerio, B. Siciliano, and E. W. Hawkes, “An obstacle-interaction planning method for navigation of actuated vine robots,” in *2020 IEEE International Conference on Robotics and Automation (ICRA)*. Paris, France: IEEE, May 2020, pp. 3227–3233. [Online]. Available: <https://ieeexplore.ieee.org/document/9196587/>
- [24] A. Ataka, A. Stilli, J. Konstantinova, H. A. Wurdemann, and K. Althoefer, “Kinematic Control and Obstacle Avoidance for Soft Inflatable Manipulator,” in *Towards Autonomous Robotic Systems*, K. Althoefer, J. Konstantinova, and K. Zhang, Eds. Cham: Springer International Publishing, 2019, vol. 11649, pp. 52–64, series Title: Lecture Notes in Computer Science. [Online]. Available: [http://link.springer.com/10.1007/978-3-030-23807-0\\_5](http://link.springer.com/10.1007/978-3-030-23807-0_5)
- [25] N. Akalin and A. Loutfi, “Reinforcement Learning Approaches in Social Robotics,” *Sensors*, vol. 21, no. 4, p. 1292, Feb. 2021. [Online]. Available: <https://www.mdpi.com/1424-8220/21/4/1292>
- [26] P. Kormushev, S. Calinon, and D. Caldwell, “Reinforcement Learning in Robotics: Applications and Real-World Challenges,” *Robotics*, vol. 2, no. 3, pp. 122–148, Jul. 2013. [Online]. Available: <http://www.mdpi.com/2218-6581/2/3/122>
- [27] B. R. Kiran, I. Sobh, V. Talpaert, P. Mannion, A. A. A. Sallab, S. Yogamani, and P. Perez, “Deep Reinforcement Learning for Autonomous Driving: A Survey,” *IEEE Transactions on Intelligent Transportation Systems*, vol. 23, no. 6, pp. 4909–4926, Jun. 2022. [Online]. Available: <https://ieeexplore.ieee.org/document/9351818/>
- [28] “Kaggle: Your Home for Data Science.” [Online]. Available: <https://www.kaggle.com/>
- [29] “Visual Studio Code - Code Editing. Redefined.” [Online]. Available: <https://code.visualstudio.com/>
- [30] “Gymnasium Documentation.” [Online]. Available: <https://gymnasium.farama.org/index.html>



[31] “Getting Started — Stable Baselines3 2.4.0a5 documentation.” [Online]. Available: <https://stable-baselines3.readthedocs.io/en/master/guide/quickstart.html>

[32] “Weights & Biases: The AI Developer Platform.” [Online]. Available: <https://wandb.ai/site>