

# Mayank Sewlia

[mayank.sewlia@gmail.com](mailto:mayank.sewlia@gmail.com) — [sewlia.com](http://sewlia.com) — [scholar.google.com/sewlia](https://scholar.google.com/sewlia)

---

- SKILLS**      **Languages:** C++, Python, MATLAB, Simulink  
**Concepts:** DRAKE, feedback control, force control, formal methods, algorithms
- INDUSTRY**      *Motion Planning Engineer* August 2025-  
Neura Robotics GmbH, Germany  
I develop planning algorithms and control systems for a mobile manipulator platform [MIPA](#).
- EDUCATION**      *PhD in Electrical Engineering (Robotics)*  
KTH Royal Institute of Technology, Stockholm, Sweden, July 2025  
Thesis: Path Planning and Control for Multi-Manipulator Systems under Spatio-Temporal Constraints
- Master of Science, Aerospace Engineering*  
Technion-Israel Institute of Technology, Haifa, Israel, June 2020  
Thesis: Distributed Event-Triggered Control for Multi-Agent Systems with Second-Order Dynamics
- Bachelor of Technology, Aerospace Engineering*  
Alliance University, Bengaluru, India, June 2017  
Thesis: Spacecraft Trajectory Optimization using Evolutionary Algorithms
- JOURNALS**
- Sewlia, M., Verginis, C.K. and Dimarogonas, D.V., 2024. MAPS<sup>2</sup>: [Multi-Robot Anytime Motion Planning under Signal Temporal Logic Specifications](#). *International Journal of Robotics Research (IJRR)*, December 2025.
  - Chen, F., Sewlia, M. and Dimarogonas, D.V., 2024. Cooperative control of heterogeneous multi-agent systems under spatiotemporal constraints. *Annual Reviews in Control*, 57, p.100946.
  - Sewlia, M., Verginis, C.K. and Dimarogonas, D.V., 2022. [Cooperative Object Manipulation Under Signal Temporal Logic Tasks and Uncertain Dynamics](#). *IEEE Robotics and Automation Letters*, 7(4), pp.11561-11568.
  - Sewlia, M. and Zelazo, D. Bearing-Based Formation Stabilization Using Event-Triggered Control. *International Journal of Robust and Nonlinear Control*, 2024; 1-13.
  - Wong, R. C. Y, Sewlia, M., Wiltz, A., and Dimarogonas, D. V., 2025. “Generating and Optimizing Topologically Distinct Guesses for Mobile Manipulator Path Planning”. *IEEE Robotics and Automation Letters*, 10(12), pp. 12453-12460.
- CONFERENCES**
- Sewlia, M., Verginis, C. K., and Dimarogonas, D. V. [Leader-Follower Cooperative Manipulation Under Spatio-Temporal Constraints](#), IROS 2024
  - Sewlia, M., Verginis, C. K., and Dimarogonas, D. V. “Cooperative Sampling-Based Motion Planning under Signal Temporal Logic Specifications”. In *2023, American Control Conference (ACC)*, 2697-2702. *IEEE*.

- Sewlia, M. and Zelazo, D. “Distributed Event-Based Control for Second-Order Multi-Agent Systems. ” *In 2019, 27th Mediterranean Conference on Control and Automation (MED)*, 310-315. IEEE.

## TEACHING AND SUPERVISION

- Automatic Control Course EL1020, Bachelors level, KTH, 7.5 ECTS.
- Control Theory and Practice - Advanced Course EL2520, Masters level, KTH, 7.5 ECTS.
- Masters thesis supervision (jointly with Dženan Lapandić): Yiyu Sun: *Kinodynamic Trajectory Generation and Tracking*.
- Masters thesis supervision (jointly with Ericsson Research): Hampus Carlens: *Manipulation on the move for pick and place tasks*.
- Masters thesis supervision (jointly with Adrian Wiltz): Rufus Wong: *Motion Planning of Redundant Manipulators*.
- Masters thesis supervision: Sara Gomiero: *Sampling-based synthesis of controllers for coupled agents under Signal Temporal Logic specifications*.

## LEADERSHIP

- (Jan 2022 - November 2023) I served as the Vice-President of the KTH Rowing board: where I coordinated beginner courses each semester, managed boat logistics, and represented KTH in local and national competitions.
- (Dec 2021 - June 2022) Served as a Board Member and *Council Coordinator* for the KTH PhD Chapter, involving liaising with all five schools at KTH and advocating for enhanced PhD-level courses.
- (Oct 2015 - June 2017) Co-founded *Quasor Rocketry LLP*, a model rocketry startup at Alliance University.

## PROJECT WORK

- *Design and FE Analysis of Electrical Harness Connector Support System*, ISRO Satellite Center, Indian Space Research Organization, Bengaluru, 2017.
- *Demonstrator Model for Supersonic Wind Tunnel*, Design for Additive Manufacturing Challenge, Additive Industries, The Netherlands, 2017.
- *Structural Analysis of Rear Engine Mount for Advanced Light Helicopter*, Helicopter Division, Hindustan Aeronautics Limited, Bengaluru, 2016.

## ACADEMIC ACHIEVEMENTS

- Recipient of *MHRD Scholarship for Academic Excellence* from 2013-2017.
- Department graduating rank of 3, Class of 2017, Alliance University.
- Passed 12th grade with 92.8% and college *Biology* topper.
- Passed 10th grade with 94.7% and school *Mathematics* topper.

## CO-CURRICULAR ACTIVITIES

Member of MENSA Sweden.  
 Attended *Summer School of Engineering and Sciences*, Summer 2017, Technion.  
 Volunteered at *Team Krishna*, Global Learning XPRIZE.  
 Volunteered at CSR Initiative, Alliance University, Bengaluru.  
 Flight Laboratory Training, IIT Kanpur, Kanpur.  
 Presented and attended *59th Congress of ISTAM*, December 2014.  
 Finalists *ROBO-ZEST 2014*, IIT Bombay, Mumbai.