苏隽岩

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教育经历

- 香港城市大学, 数据科学博士 2020-2025
- 上海科技大学, 计算机科学与技术学士 2015-2019

项目与技术栈

独立开发了E2Pilot, 一款专为重型卡车长途运输设计的节能导航系统:

- 项目包括网页端和移动端的应用。用户只需输入起点、目的地及取送货时间窗，系统即可规划出最经济的路线和车速。通过实时车速指引，确保用户能够在准时送达的同时实现燃油成本节约。
- 项目已成功完成首次实车路测，相关成果已发表多篇论文。
- 使用的技术栈包括 Julia、HTML/CSS/JavaScript、Swift 等。

主导开发了ParExMPC:

- ParExMPC 是一款模型预测控制（MPC）设计工具箱。给定一个非线性系统模型和一个优化目标，用户可通过 MATLAB 界面生成一个轻量 MPC 控制器。相关成果已发表论文。
- 可生成 C 代码。生成的代码可部署在最低内存 2kb 嵌入式设备上。
- 使用技术栈包括 MATLAB、C。

其它技术栈:

- 参与了共同署名的所有论文的代码实现以及仿真工作。
- 熟练使用 Julia、Python、C/C++、MATLAB。
- 曾经使用过 ROS、Cadence、Verilog、JavaScript、Swift。

奖项与荣誉

- 美团低空经济挑战赛第二名, 2023
- CDC 学生旅行资助与研讨会支持, 2023
- 香港城市大学杰出学术表现奖, 2023
- ACM e-Energy 最佳论文奖, 2023
- HK Tech 300 & HKTSP 种子基金获得者, 2022
- 上海科技大学优秀毕业生, 2019

期刊论文

1. Junyan Su, Qiulin Lin, and Minghua Chen. Optimizing Carbon Footprint in Long-Haul Heavy-Duty E-Truck Transportation. *Nature Communications*, accepted for publication.
2. Qiulin Lin, Junyan Su, and Minghua Chen. Optimal Algorithms for Online Age-of-Information Optimization in Energy Harvesting Systems. *IEEE Transactions on Networking*, 2025.
3. Yuning Jiang, Kristína Fedorová, Junyan Su, Juraj Oravec, Boris Houska, and Colin N. Jones. Fast and Lightweight: A Real-Time Parallelizable MPC for Embedded Systems. *European Journal of Control*, page 101217, 2025.
4. Junyan Su, Runzhi Zhou, Qingyu Liu, Wenjie Xu, Minghua Chen, and Haibo Zeng. Minimizing Emission for Timely Heavy-Duty Truck Transportation. *IEEE Transactions on Intelligent Transportation Systems*, 2024.
5. Yuning Jiang, Junyan Su, Yuanming Shi, and Boris Houska. Distributed Optimization for Massive Connectivity. *IEEE Wireless Communications Letters*, 9(9):1412–1416, 2020.

会议论文

1. Qiulin Lin, Junyan Su, and Minhua Chen. Competitive Online Age-of-Information Optimization for Energy Harvesting Systems. In *Proceedings of IEEE INFOCOM*, 2024.
2. Junyan Su, Qiulin Lin, Minghua Chen, and Haibo Zeng. Minimizing Carbon Footprint for Timely E-Truck Transportation: Hardness and Approximation Algorithm. In *Proceedings of IEEE Conference on Decision and Control (CDC)*, 2023.
3. Junyan Su, Qiulin Lin, and Minghua Chen. Follow the Sun and Go with the Wind: Carbon Footprint Optimized Timely E-Truck Transportation. In *Proceedings of the ACM e-Energy*, 2023. **Best Paper Award**.
4. Qiulin Lin, Yanfang Mo, Junyan Su, and Minghua Chen. Competitive Online Optimization with Multiple Inventories: A Divide-and-Conquer Approach. In *Proceedings of ACM SIGMETRICS*, 2022.
5. Junyan Su, Yuning Jiang, Altuğ Bitlislioğlu, Colin N. Jones, and Boris Houska. Distributed Multi-Building Coordination for Demand Response. In *Proceedings of 21st IFAC World Congress*, 2020.
6. Ling Gao, Junyan Su, Jiadi Cui, Xiangchen Zeng, Xin Peng, and Laurent Kneip. Efficient Globally-Optimal Correspondence-Less Visual Odometry for Planar Ground Vehicles. *Proceedings of IEEE International Conference on Robotics and Automation (ICRA)*, 2020.

专利

- M. Chen., J. Su, and Q. Lin, "Carbon Footprint Optimized Timely E-Truck Transportation", 8 Feb 2024, (Filed) U.S. Patent Application No. 18/436,350.