Yujing Zhou
Resume

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Princeton, NJ 08540
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Education

Princeton University 2022 – Present
Ph.D. student in the Mechanical and Aerospace Engineering Department
GPA: 3.76/4.0

M.S. in Mechanical Engineering, The University of Texas at Austin 2020 – 2022
Ph.D. student in the Mechanical Engineering Department
GPA: 4.0/4.0

B.S. in Mechanical Engineering, Bucknell University 2016 – 2020
Minors in Mathematics and German
GPA: 3.81/4.0

Research Experience

- ***Risk-Minimizing Two-Player Zero-Sum Stochastic Differential Game via Path Integral Control***
- ***Motor Speed Control using Extremum Seeking-based Ultra-local Model Predictive Control***
- ***Lane Detection using Extremum Seeking Method***
- ***Lane Detection using Model-Free Control***
- ***Eliciting Emergency Driver Responses with In-Vehicle Stimuli***
- ***Stroke-Hand-Recovery Device***
- ***Resin-Extrusion 3D Printer***

Publications

- A. Patil, **Y. Zhou**, T. Tanaka, and D. Fridovich-Keil, "Risk-Minimizing Two-Player Zero-Sum Stochastic Differential Game via Path Integral Control," *IEEE Conference on Decision and Control (CDC).* (Under review)
- **Y. Zhou**, Z. Wang, and J. Wang, "Illumination-Resilient Lane Detection by Threshold Self-adjustment Using Newton-based Extremum Seeking," *IEEE Transactions on Intelligent Transportation Systems*
- **Y. Zhou**, Z. Wang, and J. Wang, "Extremum-Seeking-Based Ultra-local Model Predictive Control and Its Application to Electric Motor Speed Regulation," *Proceedings of the 2022 Modeling, Estimation and Control Conference (MECC), Jersey City, New Jersey, Oct. 2022*
- **Y. Zhou**, Z. Wang, and J. Wang, "Real-Time Adaptive Threshold Adjustment for Lane Detection Application under Different Lighting Conditions Using Model-Free Control," *Proceedings of the 2021 Modeling, Estimation and Control Conference (MECC), Austin, Texas, Oct. 2021*

Skills

Programming: MATLAB; C++; Python; LaTeX; LabView