Dynamic Surface Control for an Underactuated Underwater Biomimetic Vehicle-Manipulator System

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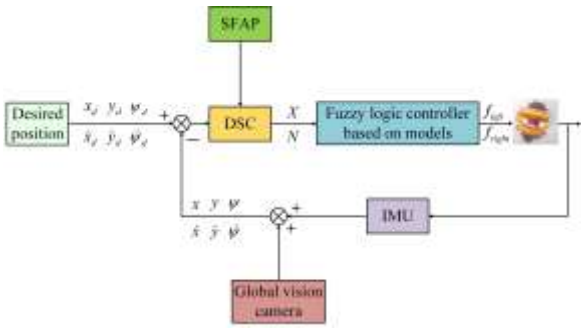
- This paper proposes a position control method based an improved dynamic surface control.
- A surge force adaptive process is designed to solve the underactuated problem of the UBVMS.
- Simulations and experiments validate the control method's feasibility and robustness in the application of UBVMSs.



Block diagram of the position control framework