SMC eNewsletter Student Corner (December 2023 Issue)
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In this inaugural issue of the Student Corner Column, we interview Xudong Yu, a student first author of the paper titled "Self-Supervised Imitation for Offline Reinforcement Learning With Hindsight Relabeling" published in the December 2023 issue of the IEEE Transactions on Systems, Man, and Cybernetics: Systems.

1. Please tell us a bit about your background and your research area.
I am Xudong Yu, currently pursuing my Ph.D. at Harbin Institute of Technology. My research primarily revolves around offline reinforcement learning, preference-based RL, with a focus on generalization issues in RL. My interest in this field stems from contemplating human learning processes. Learning from offline data and trial-and-error interactions are instrumental in crafting autonomous learning agents. Besides autonomous learning, I aspire for agents that can generalize across diverse tasks and environments.

2. How did you become interested in your field?
My interest arises from contemplating how humans learn. Learning from offline data and the iterative process of trial and error contribute significantly to building autonomous learning agents. Additionally, I aim for these agents to generalize across varied tasks and environments.

3. What motivated you to join the IEEE SMC Society?
I joined IEEE SMC because it offers a platform to exchange ideas and share experiences with like-minded researchers. It's a community where I continuously learn, explore, and connect with top experts in intelligent systems and control.

4. What motivated you to publish in the IEEE Transactions on Systems, Man, and Cybernetics: Systems?
This journal holds significant prestige in fields such as reinforcement learning and control. I chose to publish here due to its prominence and influence in advancing research in these areas.

5. What is the main innovation in your paper?
The innovation lies in proposing a method that combines self-supervised imitation learning with hindsight relabeling. This introduces a novel approach for offline reinforcement learning, effectively leveraging past data. It's crucial for enhancing the efficiency and practicality of reinforcement learning, addressing challenges related to generalization in complex environments.

6. Where would you see yourself in 5-years' time career wise?
Over the next five years, I aim to expand the application of reinforcement learning into various domains. This includes exploring the generalization between different tasks, transitioning from offline to online learning, and extending feedback signals from predefined rewards to encompass human or AI-generated feedback. This aligns with the current focal point of RLHF research. Moreover, I look forward to collaborating with a diverse array of exceptional researchers to further these pursuits and contribute to the field's advancements.

Xudong Yu received the B.E. degree in space science and technology and M.E. degree in control engineering from the Harbin Institute of Technology, Harbin, China, in 2018 and 2020, respectively, where he is currently pursuing the Ph.D. degree with Space Control and Inertial Technology Research Center. His main research interests include reinforcement learning and unmanned systems.