CPC Collaboration

Beneficiary: UNIVERSITY OF TORONTO

Solution: NOMACHINE ENTERPRISE DESKTOP FOR WINDOWS
AND ENTERPRISE DESKTOP FOR LINUX

Goal: Program a car to navigate an urban driving course in an automated driving mode.

Technical Challenges:

The University of Toronto's autonomy team, aUToronto, was gearing up to participate in SAE and GM's annual AutoDrive Challenge when they approached us. This was their fourth year competing after focusing on prototyping and integrating their vehicle the prior three years. It was time to put their vehicle to the test – doing complex maneuvers and tasks that showcase Level 4 SAE Autonomy capabilities. The challenge? They needed to remotely access their server – and they needed a server that would allow multiple people to access it at once, from different locations.

Solutions:

Previously, the student team had connected a monitor directly to the server with wires running across the car, making for a bulky and uncomfortable passenger experience. We provided them with NoMachine technology that has small enough latency to circumvent this problem and enhance efficiency. Then we paired that server with a network of NoMachine remote desktop solutions so that their team of up to 15 people could access the car's main server independently of each other, at any given time, from any given place (whether at school, home, or elsewhere). The results? Seamless connectivity.

Outcome:

Together with NoMachine, we collaborated with aUToronto, the University of Toronto's student autonomy team, to enhance their vehicle to successfully complete Level 4 SAE Autonomy tasks. By integrating NoMachine's remote desktop and terminal server licensing into their vehicle, the team was able to more effectively collaborate together and improve the driving experience, placing first at the competition!

> *Testimonial quote: "Big shoutout to CPC/NoMachine, our go-to solution for remote desktop access! Thanks to their powerful software, our team can seamlessly connect to our work computers from anywhere!"*