

PhD project, QP-based Controller to Unify COM Planning and Torque Control

The paper about a QP-based controller design I introduced in the video:

https://drive.google.com/file/d/16q1_04dSRA_jrcrUPTNVteyPb7pzLs8M/view

MathWorks, Safe trajectory tracking using Sawyer

This is a controller I implemented (though is not on bipedal robot) for safe trajectory tracking on Sawyer robot from Rethink Robotics. I implemented it in a few different ways for simulations and experiments and gained some experience of robot-environment interaction.

https://kennethchao.github.io/project/projects_intern/

MS project, Mechatronics of a Humanoid Robot Nino

In my video and my main PhD studies (and also the project during IHMC internship) are more about developments of QP-based controller design/trajectory optimizations, the following link is about my experience of building the bipedal robot system in my master's studies, which is summarized in the following webpage:

https://kennethchao.github.io/project/projects_ms/