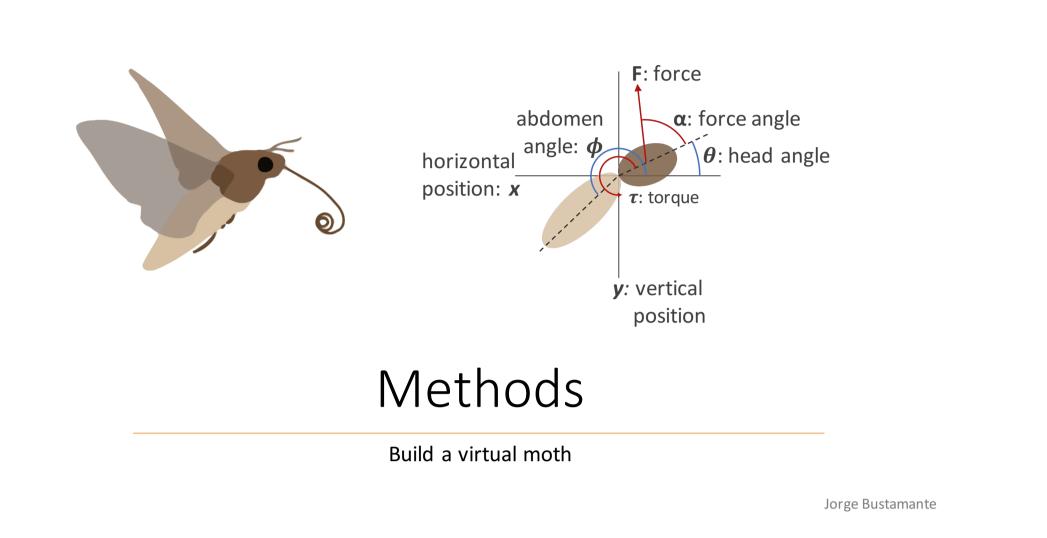
Neural Network Visualization

Zijian Li, Callin Switzer, Yue Zhao and Zhengde Zhao University of Washington

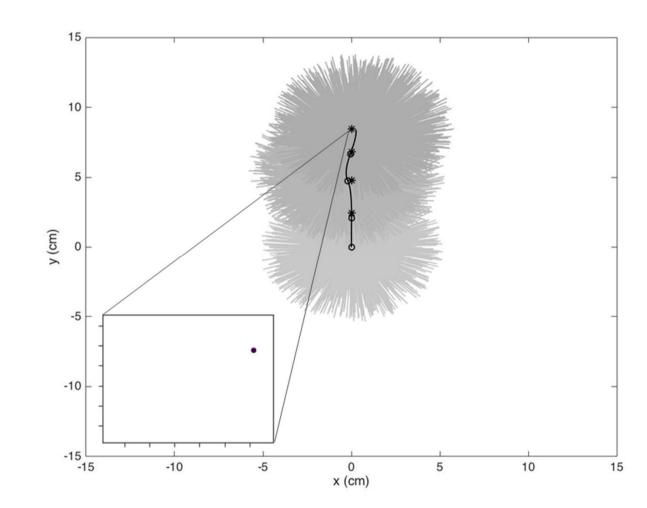


Motivation

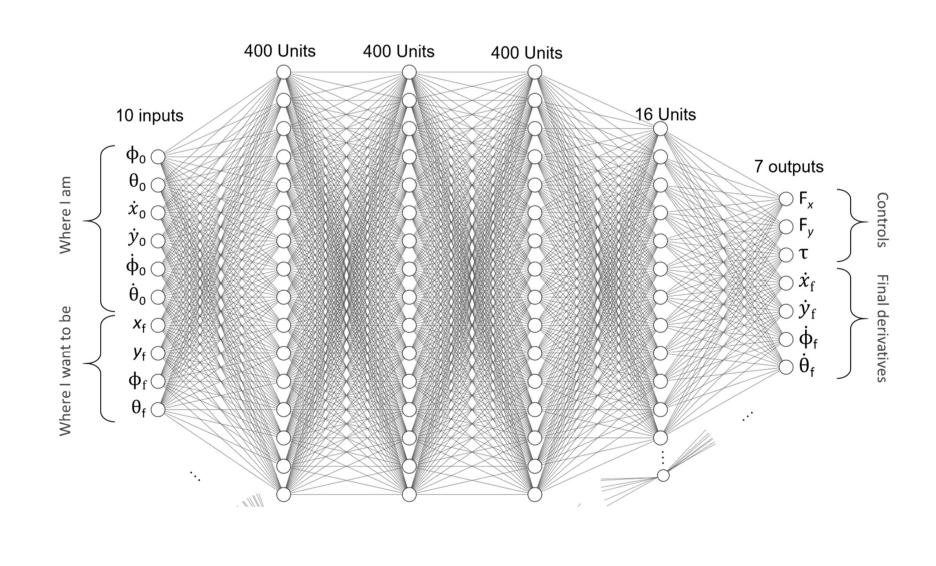
Learning a non-linear controller for insect flight dynamics with a deep neural network



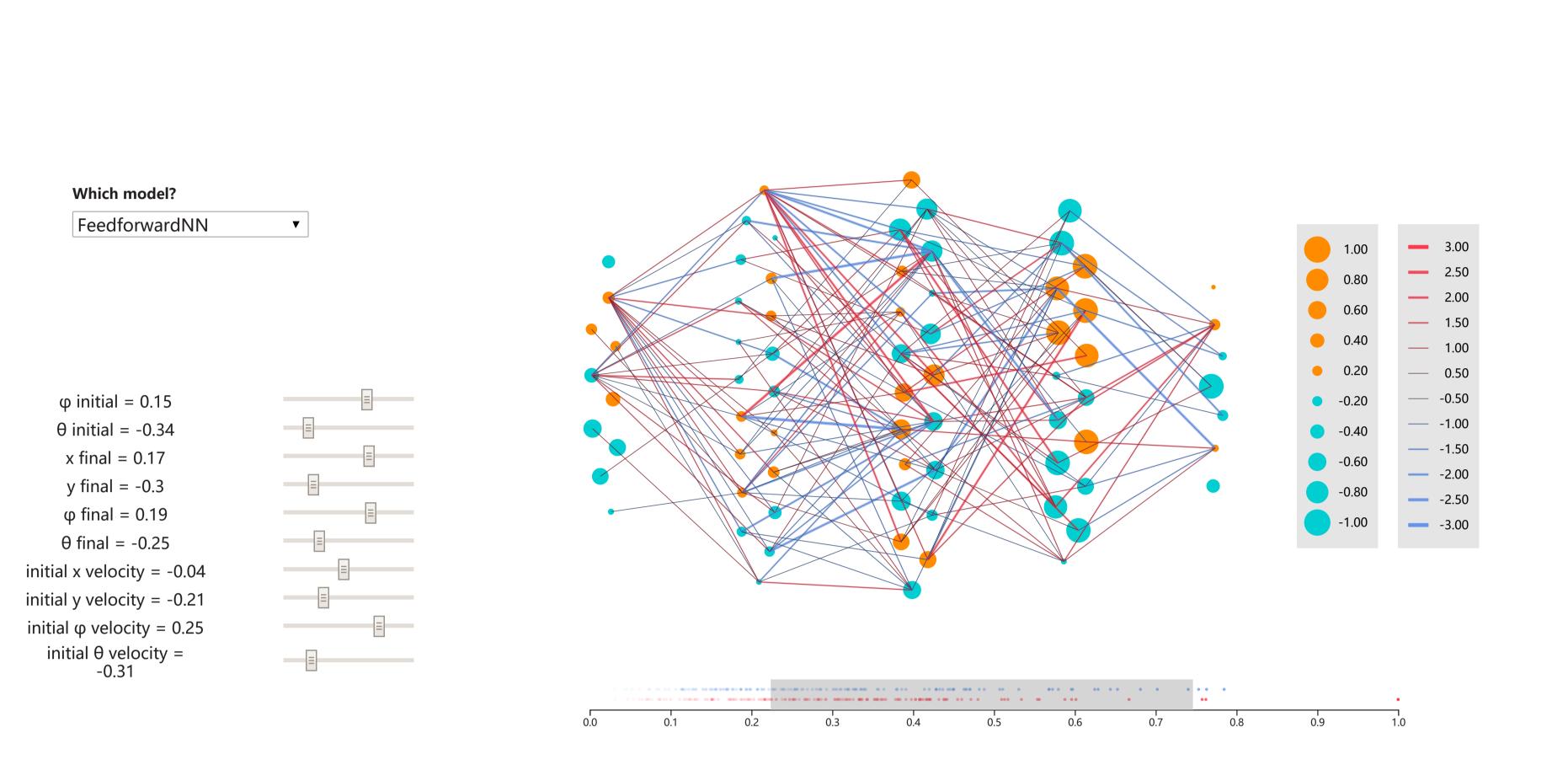
Question: What is the temporal pattern of forces required to follow a complex trajectory? If I know where I am, and where I want to go, how do I get there?



Answer: Deep learning + Model Predictive Control



Visualizing neural network architecture



Interaction techniques

- ► The nodes can be dragged to re-position.
- ▶ Dropdown menu that allows to choose different neural network.
- ► Sliders that allow to choose values for each input variable.
- ▶ The brush allows to choose the range of the weight (in absolute value) to be shown.
- ▶ When hover on the nodes or links, the details will show up.