Auxiliary Material of "Button Simulation and Design via FDVV Models"

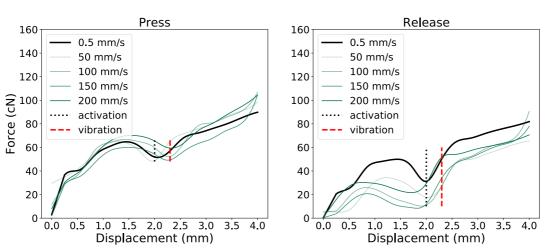
1. Introduction

This document forms the auxiliary material accompanying the paper, **Button Simulation and Design via FDVV Models**. It provides all the FDVV models obtained from six physical buttons and the actuation signals used to drive the button simulator.

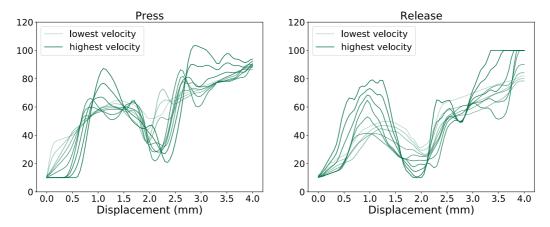
2. FDVV Models and the corresponding actuation signals

a. Cherry MX Clear

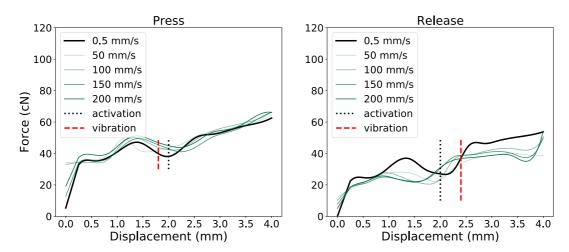




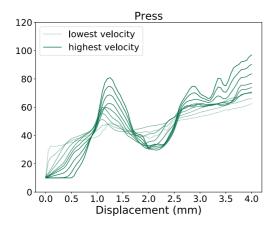


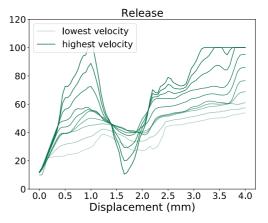


b. Cherry MX Brown - FDVV Model

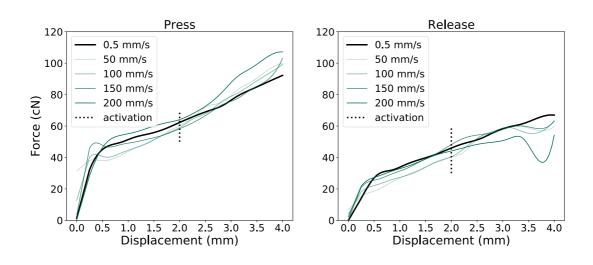


- Actuation Signals

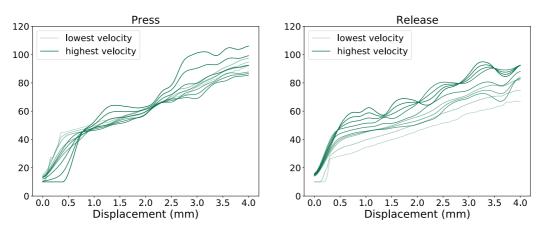




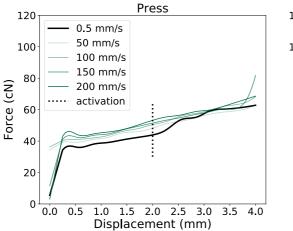
c. Cherry MX Black - FDVV Model

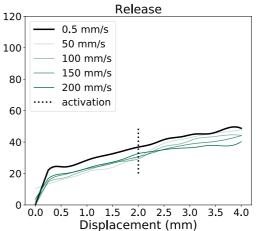


- Actuation Signals

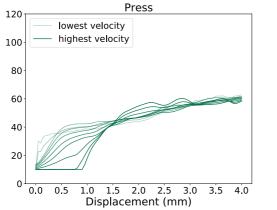


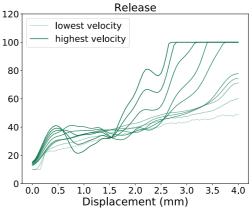
d. Cherry MX Red - FDVV Model



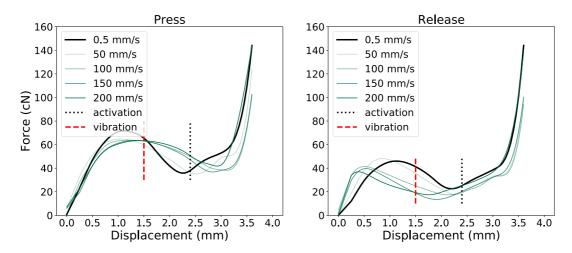


- Actuation Signals

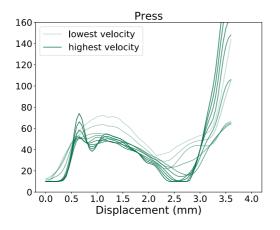


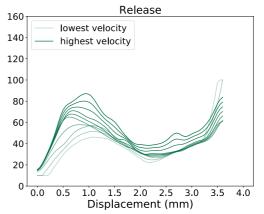


e. HP PR1101U - FDVV Model

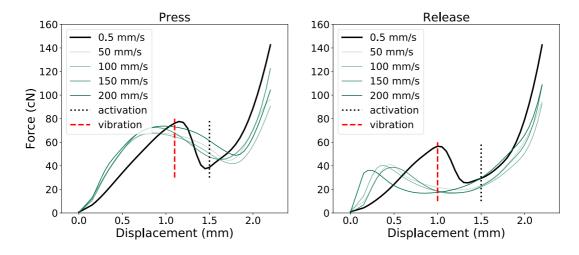


- Actuation Signals

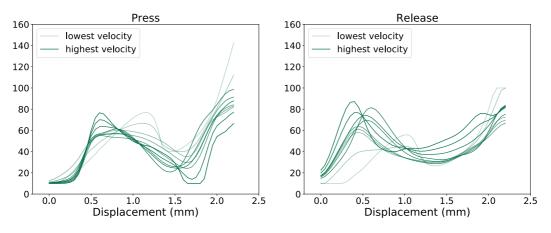




f. MacBook Pro 2011 - FDVV Model



- Actuation Signals



3. Open Science

The full data and other materials in this paper are released on our project page at <u>http://userinterfaces.aalto.fi/button-design</u>.

The materials include 3D models, circuit design, component specifications, construction details of the simulator, and the programs for controllers. The overall cost for the simulator is about \$550.