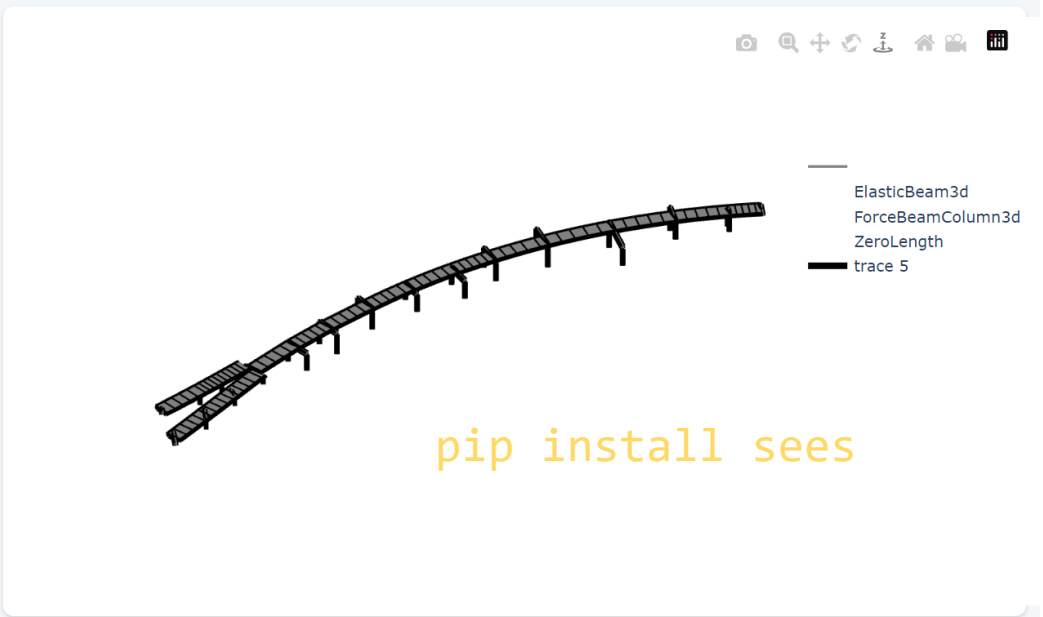
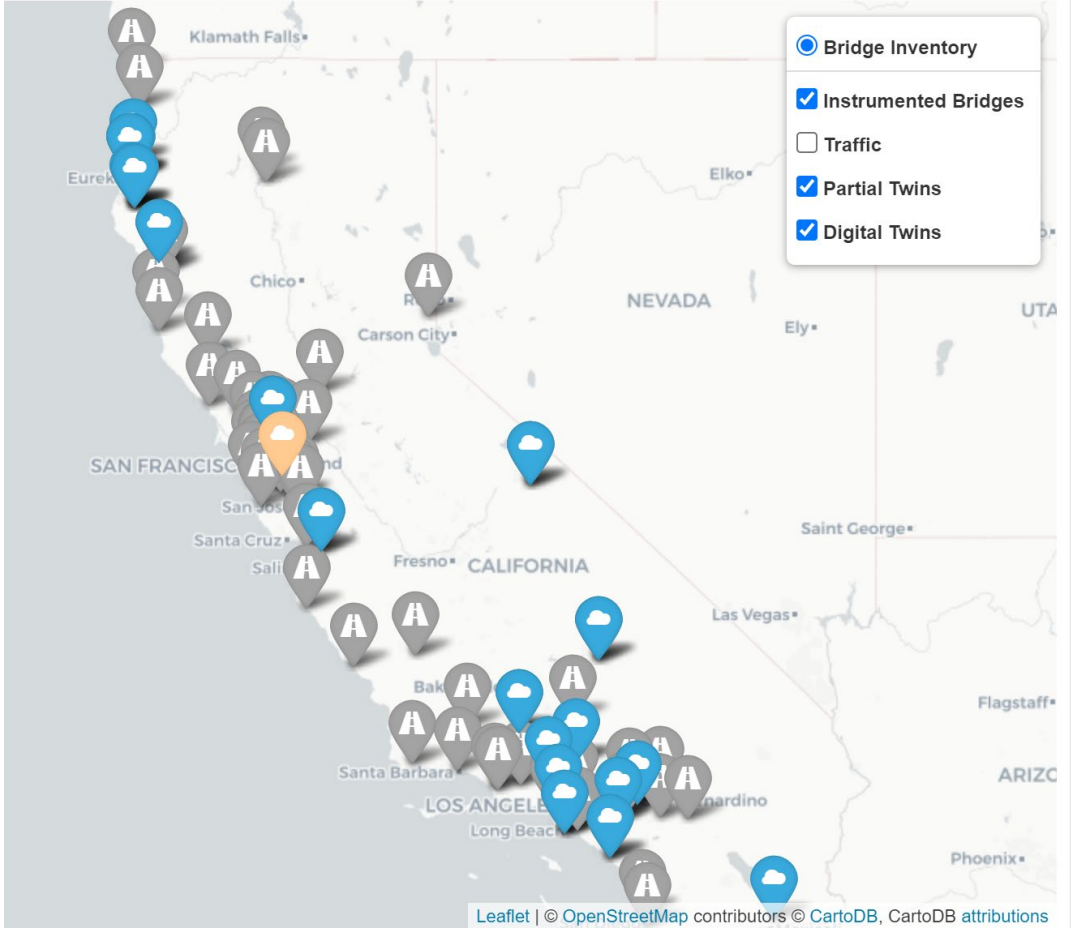


Station No.
CE58658



Chrystal Chern
4th / 6th Year
Supervisor: Prof. Mosalam
Topic: System Identification



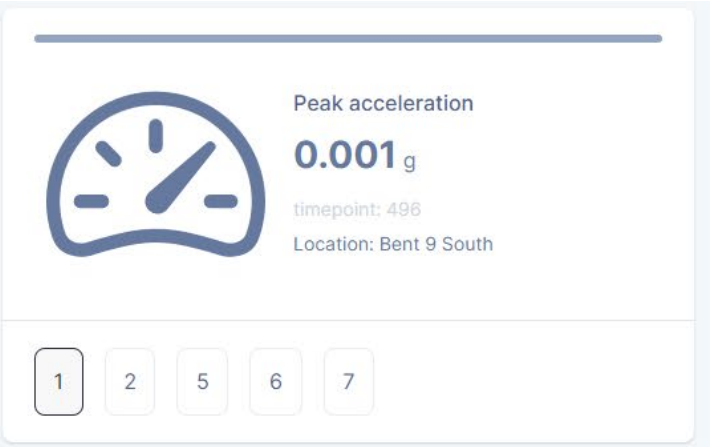
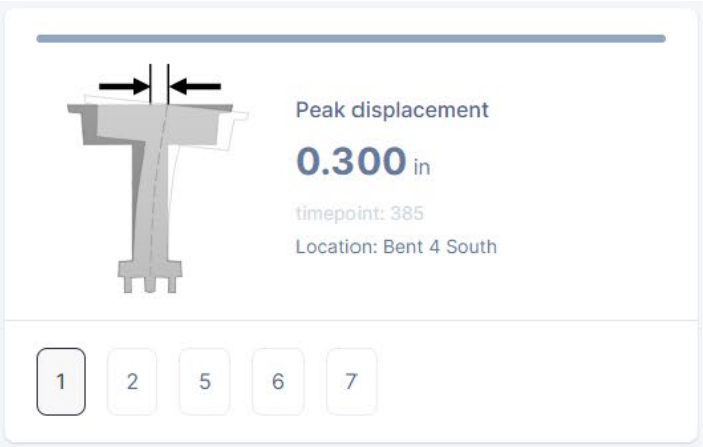


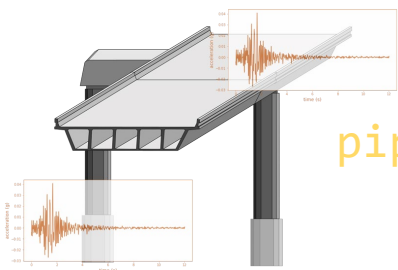
Sensor Data

Record ID: 58658-G0133-21275.03

+ Acceleration

LOCATION	IDS	1	2	3
Abutment 1	1 2 3	-8.732	-12.072	15.011
Bent 3 South Column Grnd Level	6 7	11.807	-20.781	





pip install mdof

$$\frac{d}{dt} \mathbf{x}(t) = \mathbf{A} \mathbf{x}(t) + \mathbf{B} \ddot{\mathbf{u}}_g(t) \quad \ddot{\mathbf{u}}_f(t) = \mathbf{C} \mathbf{x}(t) + \mathbf{D} \ddot{\mathbf{u}}_g(t)$$

$$\ddot{\mathbf{q}}(t) = -\mathbf{\Lambda} \mathbf{q}(t) - \mathbf{\Phi}^{-1} \mathbf{I} \ddot{\mathbf{u}}_g(t) \quad \ddot{\mathbf{u}}_f(t) = \mathbf{\Phi} \ddot{\mathbf{q}}(t)$$

