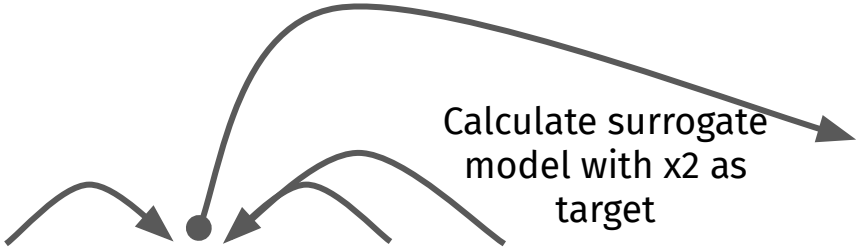
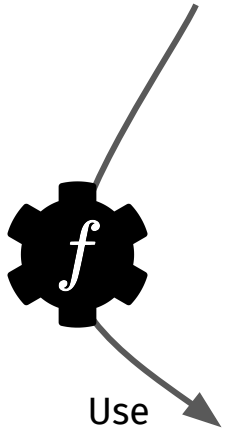


Calculate surrogate model with x2 as target

x_1	x_2	x_3	x_4
4.5	1.3	65	-2
3	**NA**	83	0.3
5	1.5	89	0.7
2	**NA**	45	1.2



Use predictions as imputation values

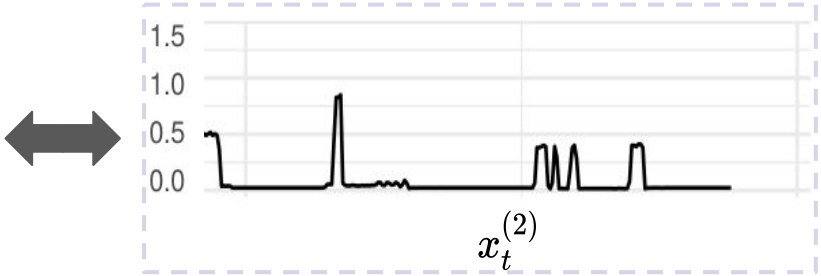
x_2	x_1	x_3	x_4
1.3	4.5	65	-2
1.5	5	89	0.7

x_2	x_1	x_3	x_4
1.1	3	83	0.3
1.7	2	45	1.2

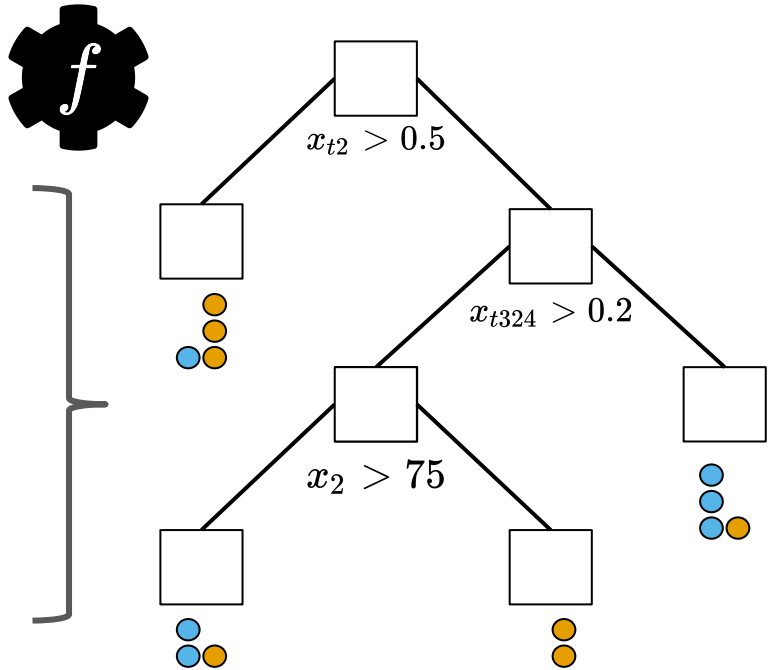
x_1	x_2	x_3	x_{t1}	x_{t2}	...	x_{t365}
4.5	1.3	65	0.8	1.1	...	2.1
3	2.0	83	0.5	0.4	...	0.0
5	1.5	89	0.7	0.7	...	2.2
2	1.3	45	1.2	1.8	...	4.3

Regular features

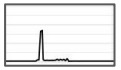
Functional features
e.g. “days in year”

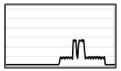


x_1	x_2	x_3	x_{t1}	x_{t2}	...	x_{t365}
4.5	1.3	65	0.8	1.1	...	2.1
3	2.0	83	0.5	0.4	...	0.0
5	1.5	89	0.7	0.7	...	2.2
2	1.3	45	1.2	1.8	...	4.3

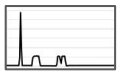


x_1	x_2	x_3	x_{t1}	x_{t2}	...	x_{t365}
4.5	1.3	65	0.8	1.1	...	2.1
3	2.0	83	0.5	0.4	...	0.0
5	1.5	89	0.7	0.7	...	2.2
2	1.3	45	1.2	1.8	...	4.3

$\hat{f}(4.5, 1.3, 65,$  $) = 117588$

$\hat{f}(3, 2.0, 83,$  $) = 88395$

$\hat{f}(5, 1.5, 89,$  $) = 55870$

$\hat{f}(2, 1.3, 45,$  $) = 82525$

x_1	x_2	x_3	x_{t1}	x_{t2}	...	x_{t365}	λ_1	λ_2
4.5	1.3	65	0.8	1.1	...	2.1	**0.9**	**0.1**
3	2.0	83	0.5	0.4	...	0.0	**1.1**	**0.4**
5	1.5	89	0.7	0.7	...	2.2	**-1**	**1.9**
2	1.3	45	1.2	1.8	...	4.3	**0.2**	**-2**