

Supplementary Materials

Table S1. Input variables that were used for the ANN models.

Direct Cracks along the Reinforcem ent	Exfoliati on of the Protectiv e Layer of Concrete	Chippi ng off of a Concret e Fragme nt in the Form of Scales	Pulling Out a Conical Fragme nt of the Concrete	Delaminati on of Cement Material in a Plane Parallel to the Surface	Cracks at the Joint, Edge and Openi ng	Stai n	The Formati on of Small Cavities in the Concret e Surface	A Diagon al Crack That Runs at an Angle of 45° to the Axis of the Concre te Elemen t	Transver se Crack That Runs at Right Angles to the Long Directio n of the Member	Parallel Cracks Starting in the Lower/Up per Zones of High Stress	Cracks in the Compress ed Zone	Inclin ed Cracks in the Suppo rt Zone	Norm al Force Crack s	Deflectio ns of Structura l Elements	Bulging of Comprese d Reinforcem ent	Rando m and Multip le Cracks on the Surfac e	Encrustati on of Mineral Salts	Erosion of a Relative ly Large Surface Area	Patter n or Map	Nodal Propagati on of Cracks	D- cracki ng	Chang e in the Color of the Concre te Surfac e	Causes
<i>x1</i>	<i>x2</i>	<i>x3</i>	<i>x4</i>	<i>x5</i>	<i>x6</i>	<i>x7</i>	<i>x8</i>	<i>x9</i>	<i>x10</i>	<i>x11</i>	<i>x12</i>	<i>x13</i>	<i>x14</i>	<i>x15</i>	<i>x16</i>	<i>x17</i>	<i>x18</i>	<i>x19</i>	<i>x20</i>	<i>x21</i>	<i>x22</i>	<i>x23</i>	<i>y</i>
0.1	1	10	1	10	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2.4	1	67.5	12.5	67.5	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
...
0	0	0	0	0	0	0	0	0.95	0.95	0.095	1	1	1	1	1	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0.3	0.3	0.03	1	1	0.5	1	1	0	0	0	0	0	0	0	2
...
1.2	0	0	6.5	0	1	0	0	0	0	0	0	0	0	0	0	1	1	12	0	0	0	0	3
1.3	0	0	7	0	1	0	0	0	0	0	0	0	0	0	0	1	1	13	0	0	0	0	3
...
0.8	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.45	0.075	0	0	4
3.6	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.85	0.15	0	0	4
...
0	0	17.5	2.5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0.25	0	1	0	5
0	0	105	20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	78	2	0	1	0	5
...
0	0	10	1	10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	6
0	0	97.5	18.5	97.5	0	0	0	0	0	0	0	0	0	0	0	0	1	75	0	0	0	1	6