

Data Visualization Report

Question 1: The park's administrators would like you to help them understand the different paths visitors take through the park and different rides they visit. In this mission, they have selected 5 visitors at random whose checkin sequences they would like you to analyse. For now, they would like you to construct a distance matrix for these 5 visitors. The five visitors have the ids: 165316, 1835254, 296394, 404385, and 448990.

Visitor ID - [[165316, 1], [296394, 2], [404385, 3], [448990, 4], [1835254, 5]]

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{1: {2: 318, 3: 329, 4: 318, 5: 336},  
 2: {1: 318, 3: 303, 4: 0, 5: 282},  
 3: {1: 329, 2: 303, 4: 303, 5: 298},  
 4: {1: 318, 2: 0, 3: 303, 5: 282},  
 5: {1: 336, 2: 282, 3: 298, 4: 282}}
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Distance Matrix

Question 2: The park's administrators would like to understand the attendance dynamics at each ride (note that not all attractions are rides). They would like to see the minimum (non-zero) attendance at each ride, the average attendance over the whole day, and the maximum attendance for each ride on a Parallel Coordinate Plot.

	Rides	Min	Avg	Max
0	Wrightiraptor Mountain	1	41.463415	123
1	Galactosaurus Rage	3	42.732877	135
2	Auvilotops Express	1	41.727679	120
3	TerrorSaur	3	33.061927	88
4	Wendisaurus Chase	3	35.727064	108
5	Keimosaurus Big Spin	1	42.324324	116
6	Firefall	1	36.418182	226
7	Atmosfear	3	59.415418	157
8	North Line	1	12.070470	69
9	Jeredactyl Jump	1	12.405941	56
10	Sauroma Bumpers	1	13.145631	57
11	Flying TyrAndrienkos	1	11.934426	62
12	Cyndisaurus Asteroid	1	12.048232	70
13	Beelzebufo	1	13.036184	71
14	Enchanted Toadstools	1	12.126214	61
15	Stegocycles	1	12.539936	59
16	Blue Iguanodon	1	12.651613	52
17	Wild Jungle Cruise	1	13.100977	70
18	Stone Cups	1	12.880399	61
19	Scholtz Express	1	14.719101	69
20	Paleocarrie Carousel	1	15.294766	74
21	Jurassic Road	1	14.682451	68
22	Rhynasaurus Rampage	1	13.901408	63
23	Kauf's Lost Canyon Escape	1	14.858333	88
24	Maiasaur Madness	1	15.286501	69
25	Kristanodon Kaper	1	15.835196	85
26	Squidosaur	1	13.813699	63
27	Eberlesaurus Roundup	1	14.038674	61
28	Dykesadactyl Thrill	1	15.280654	50
29	Ichthyoroberts Rapids	2	53.806867	151
30	Raptor Race	1	15.364384	81
31	Flight of the Swingodon	3	36.742009	111

Data used in the Next Visualization

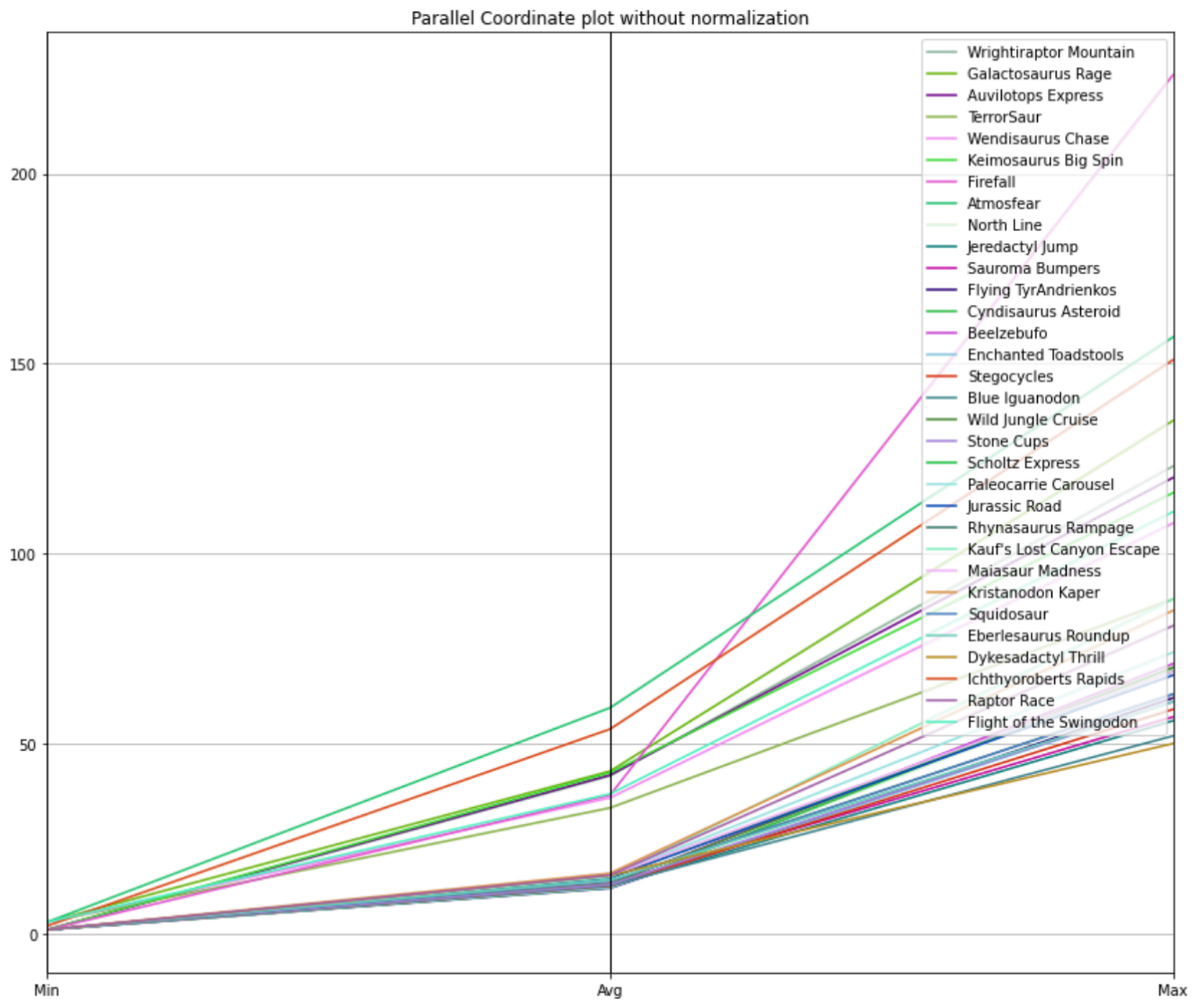


Image 1

Parallel Coordinate plot with normalization

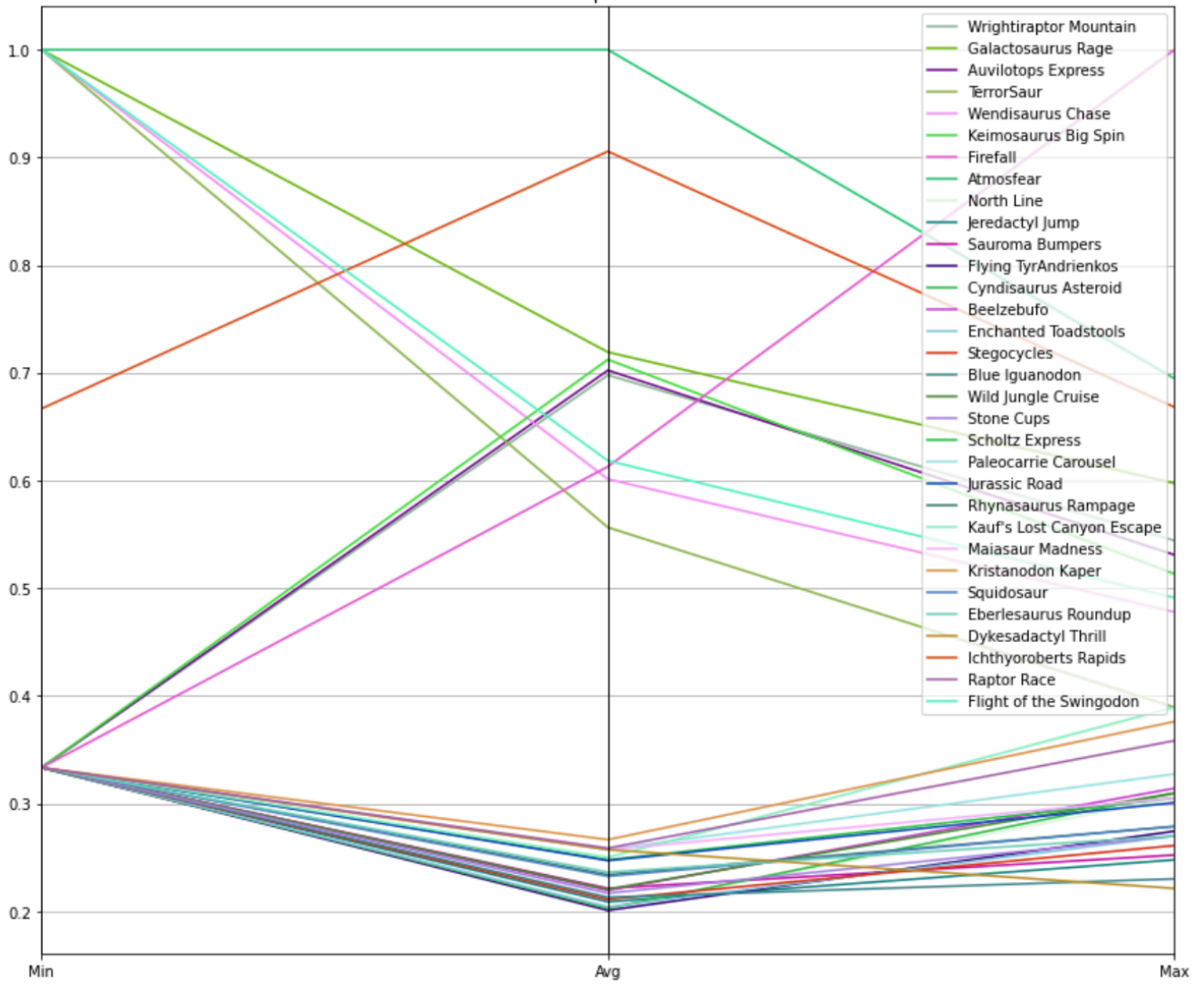
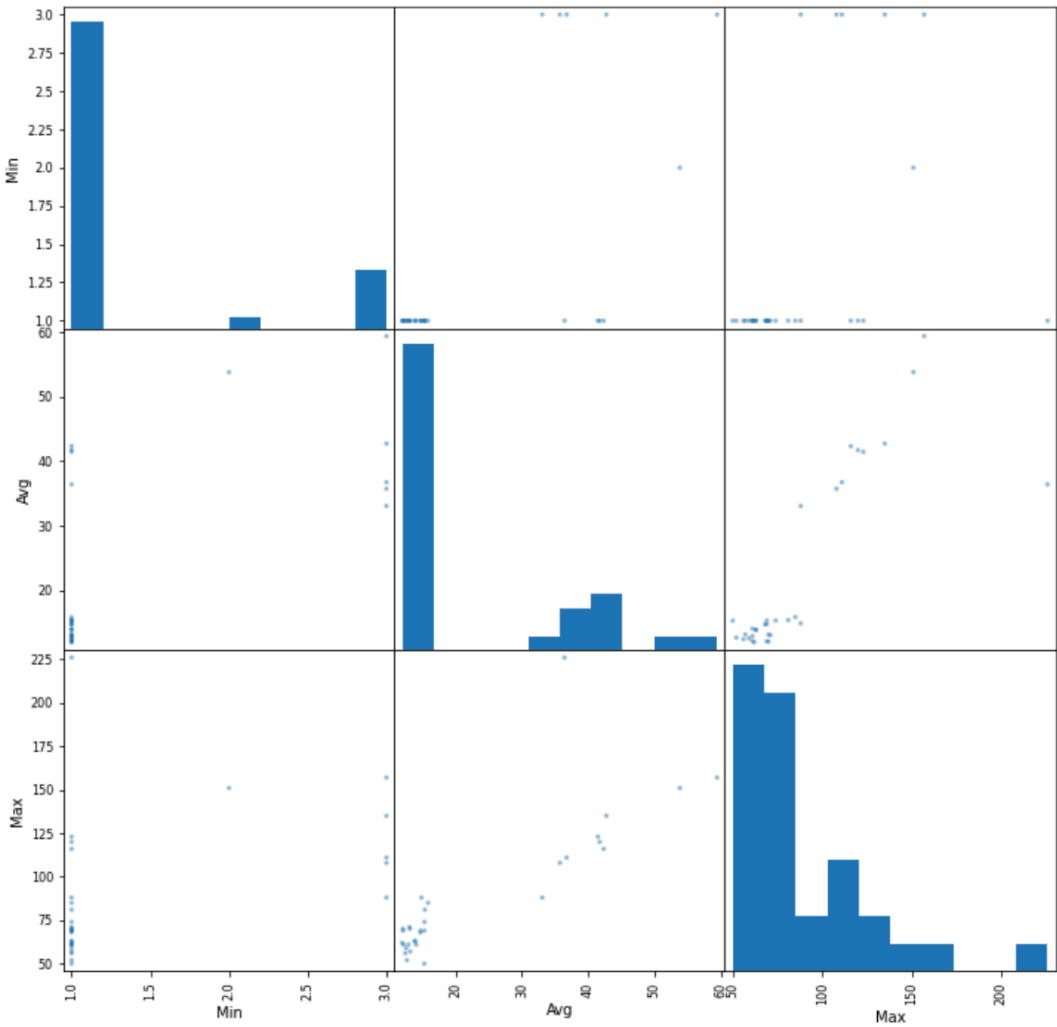


Image 2

Question 3: In addition to a PCP, the administrators would like to see a Scatterplot Matrix depicting the min, average, and max attendance for each ride as above.

Scatter matrix displaying the Min, Avg and Max of Attendance



Scatter Matrix

