Hold-Out Validation

Hold-Out Validation

Hold-Out Validation

Id	Age	Survived
1	27	0
2	45	0
3	32	1
4	66	1
5	41	0
6	29	1
7	67	0
8	51	1
9	48	0
10	26	1

Analytics Vidhya
Learn everything about analytics

Hold-Out Validation

Id	Age	Survived
3	32	1
9	48	0
10	26	1
2	45	0
4	66	1
7	67	0
5	41	0
8	51	1
6	29	1
1	27	0

Analytics Vidhya
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Hold-Out Validation

Id	Age	Survived
3	32	1
9	48	0
10	26	1
2	45	0
4	66	1
7	67	0
5	41	0
8	51	1

Test Set

6	29	1
1	27	0

Hold-Out Validation

Id	Age	Survived
3	32	1
9	48	0
10	26	1
2	45	0
4	66	1
7	67	0
5	41	0
8	51	1

=

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Id	Age	Survived
3	32	1
9	48	0
10	26	1
2	45	0

Train

4	66	1
7	67	0
5	41	0
8	51	1

Validation

Analytics Vidhya
Learn everything about analytics

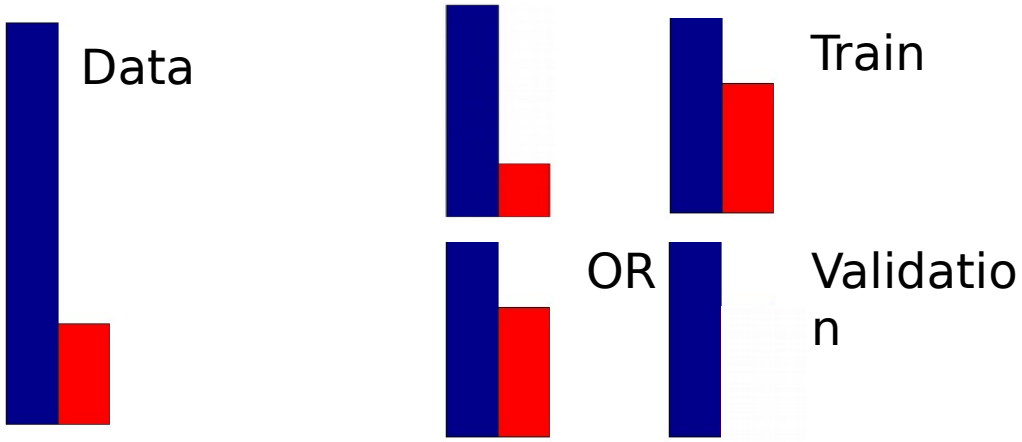
Hold-Out Validation : Issue

Hold-Out Validation : Issue

Validation set can have different distribution?

Hold-Out Validation : Issue

Validation set from different distribution?



Hold-Out Validation : Issue

Id	Age	Survived
3	32	1
9	48	0
10	26	1
2	45	0
4	66	1
7	67	0
5	41	0
8	51	1

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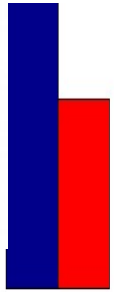
>

Id	Age	Survived
3	32	1
10	26	1
8	51	1
9	48	0

2	45	0
7	67	0
5	41	0
4	66	1

Train



Validatio
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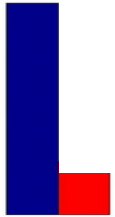

Hold-Out Validation : Issue

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3	32	1
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5	41	0
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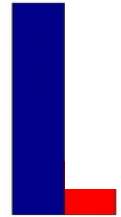
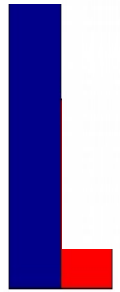
Id	Age	Survived
7	67	0
9	48	0
5	41	0
8	51	1

10	26	1
3	32	1
4	66	1
2	45	0

Train



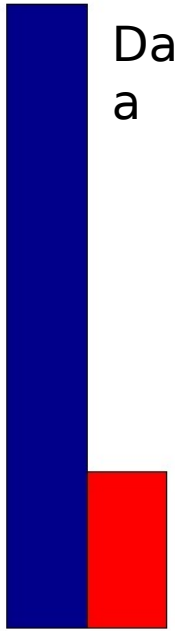
Validation



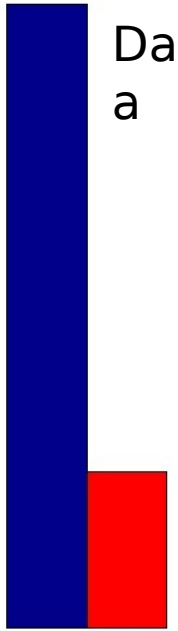
Analytics Vidhya
Learn everything about analytics

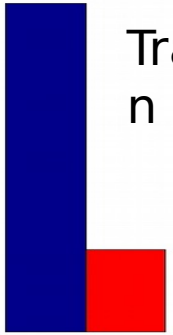
Stratified Hold-Out Validation

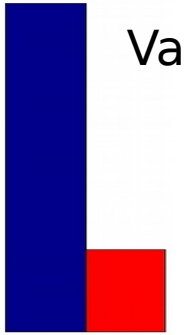
Stratified Hold-Out Validation



Stratified Hold-Out Validation







Stratified Hold-Out Validation

Id	Age	Survived
3	32	1
9	48	0
10	26	1
2	45	0
4	66	1
7	67	0
5	41	0
8	51	1

=

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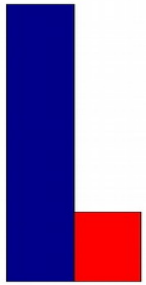
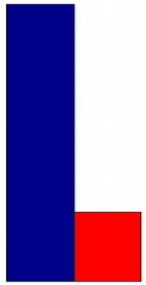
Id	Age	Survived
7	67	0
10	26	1
5	41	0
4	66	1

Train



9	48	0
3	32	1
2	45	0
8	51	1

Validation



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