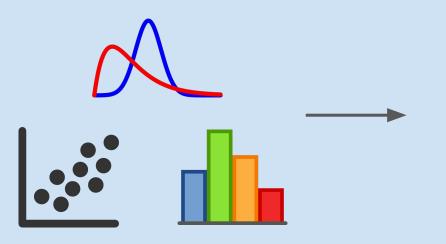


Problem: Provide data-driven insights in a format appropriate for non-specialists.

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Users are **5**x more likely to do **Action A** if they have also done **Action B**.

As an illustrative example, let's look at a fictionalized version of one of Outbound's many clients:

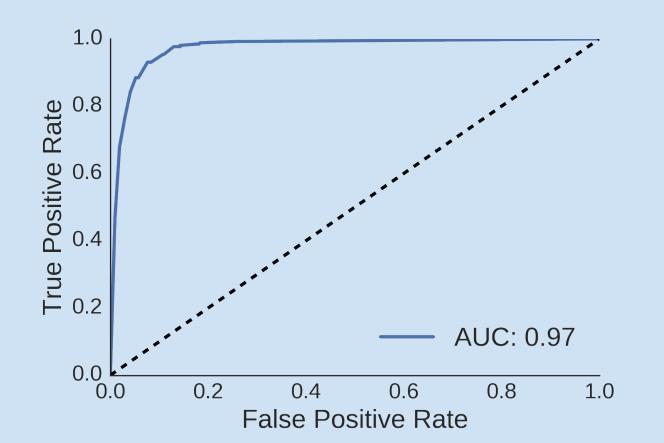
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Ben's Bread

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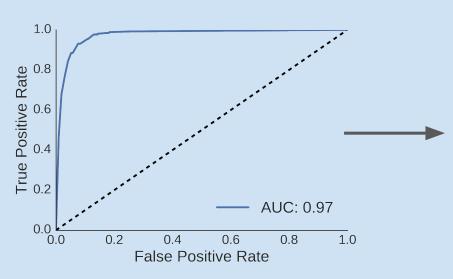
Ben's Bread

The dataset is a log of user events, such as **Buy Bread** or **Add Loaf**, with timestamps when those events occured.

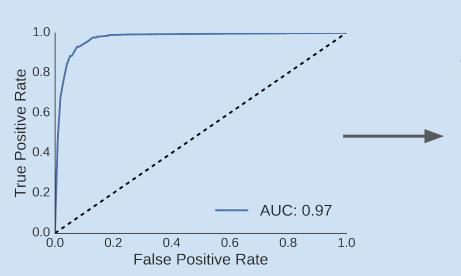








A statistical tool called a random forest classifier is able to discriminate customers who will **Buy Bread** from users who will **not** with **92.6**% accuracy.



The events that are the most important to discriminate users are:

Add Loaf, Remove Loaf,

View Daily Bread, Doughy Details and Filter Bread.

Users who...

Buy Bread have always done View Daily Bread.

Users who...

Buy Bread have always done View Daily Bread.

Add Loaf are... 19x more likely to Buy Bread.

Remove Loaf are... **2.5**x less likely to **Buy Bread**.

Users who...

Buy Bread have always done View Daily Bread.

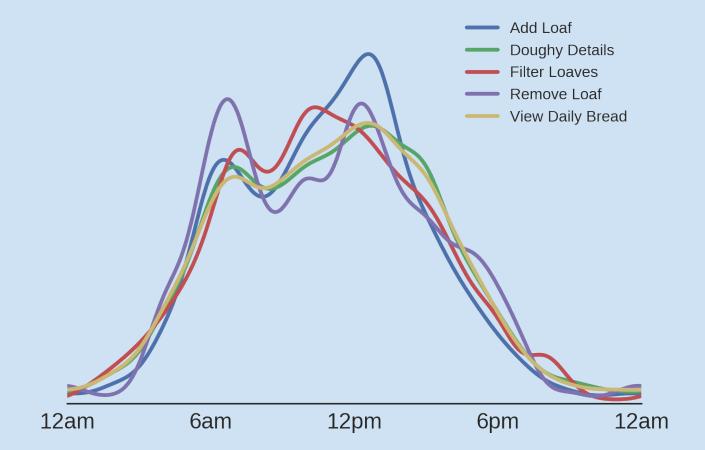
Add Loaf are... **19x** *more* likely to **Buy Bread**.

Remove Loaf are... **2.5x** less likely to **Buy Bread**.

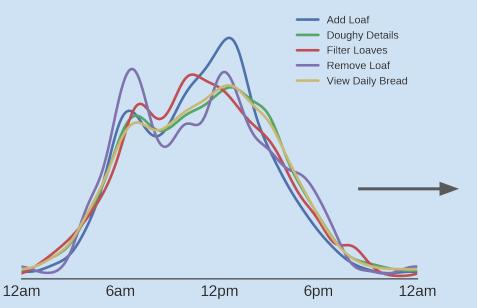
Doughy Details are... **7.5x** *more* likely to **Buy Bread**.

Filter Loaves are... **1.3x** less likely to **Buy Bread**.

When do customers of Ben's Bread use the app?



When do customers of Ben's Bread use the app?



Users are mostly likely to perform...

View Daily Bread at...
Add Loaf at...
Remove Loaf at...
Doughy Details at...
Filter Loaves at...

7am and 12pm6am and 12pm6am and 12pm6am and 12pm7am and 10pm



SALK INSTITUTE UC San Diego

Ben Regner

