

# Will You Pass? ∞

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# Why?



**Mental Stress Among Children**



**Negative Health Effects**



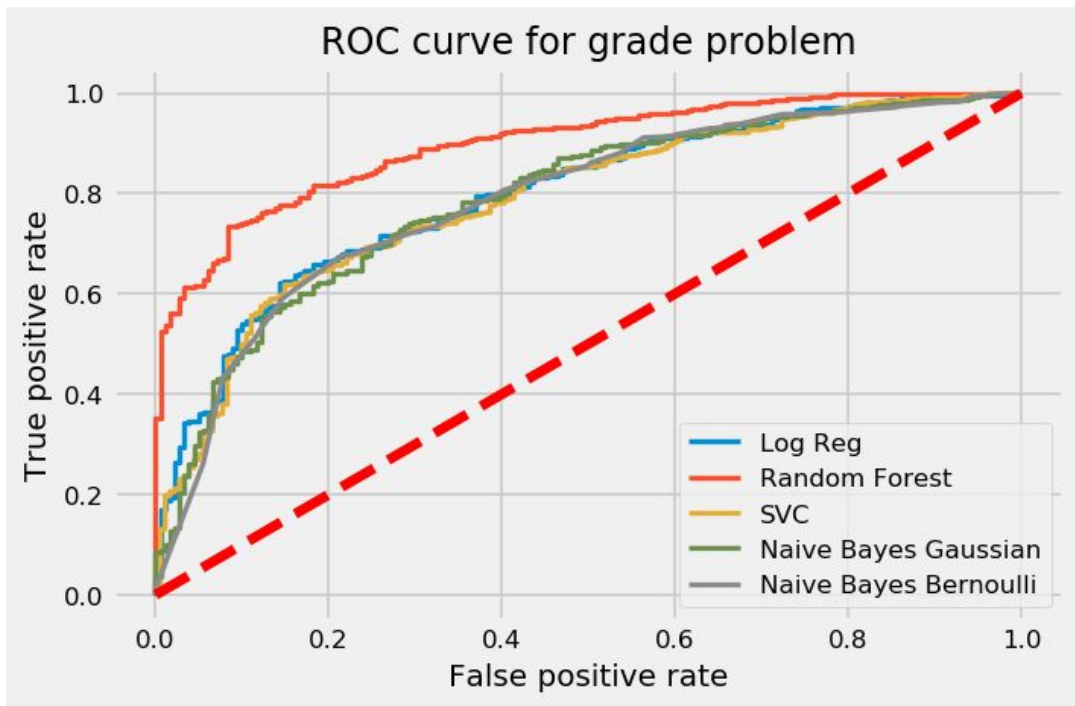
**Most High School Students Consider Cheating OK**



A photograph of a dense forest with tall, slender trees. Sunlight filters through the canopy, creating a warm, golden glow and long shadows on the forest floor. The ground is covered in lush green grass and ferns. The text "Random Forest" is overlaid in white serif font at the bottom center.

Random Forest

# Why Random Forest?



**Final Test:**

- **Precision Score: 86%**

# So Wouldn't It Be Great?

- Personal Info
- Family Info
- Historical Info (discipline related)
- Seemingly Unrelated Details



PASS

OR

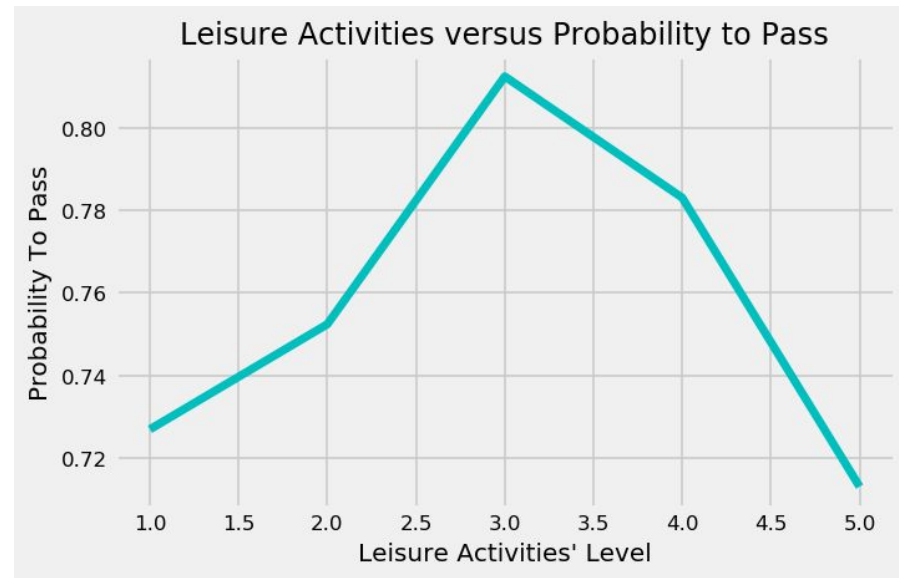
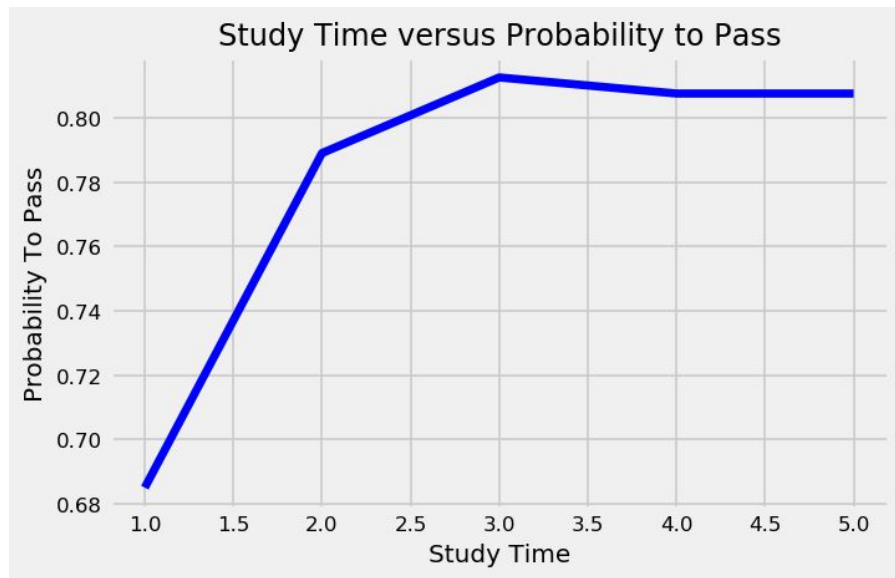
FAIL





# Fun Facts

*All Else Held Constant*



# Live Demo

## Will You Pass?



### Tell me more about Yourself:

Your First Name  Your Gender  Your Age  Address  Your Current Health

### School Related:

Discipline   
Seek to Continue Higher Education?   
Number of Previous Failures   
(in this discipline)  
Weekly Study Time (hours)   
Extra Paid Classes   
(for this discipline)  
Number of Absences   
(this year)

### Family Matters:

Family Relationship   
Mother's Education Level   
Father's Education Level

### Fun Related (be honest):

Free Time   
Going Out with Friends   
Weekend Alcohol Consumption

PREDICT

You will likely **Pass**. 😎  
Your chances of passing are **58%**.

**Thank You!**

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# Resources

P. Cortez and A. Silva. Using Data Mining to Predict Secondary School Student Performance. In A. Brito and J. Teixeira Eds., Proceedings of 5th FUTURE BUSINESS TECHNOLOGY Conference (FUBUTEC 2008) pp. 5-12, Porto, Portugal, April, 2008, EUROSIS, ISBN 978-9077381-39-7.

[\[Web Link\]](#)