



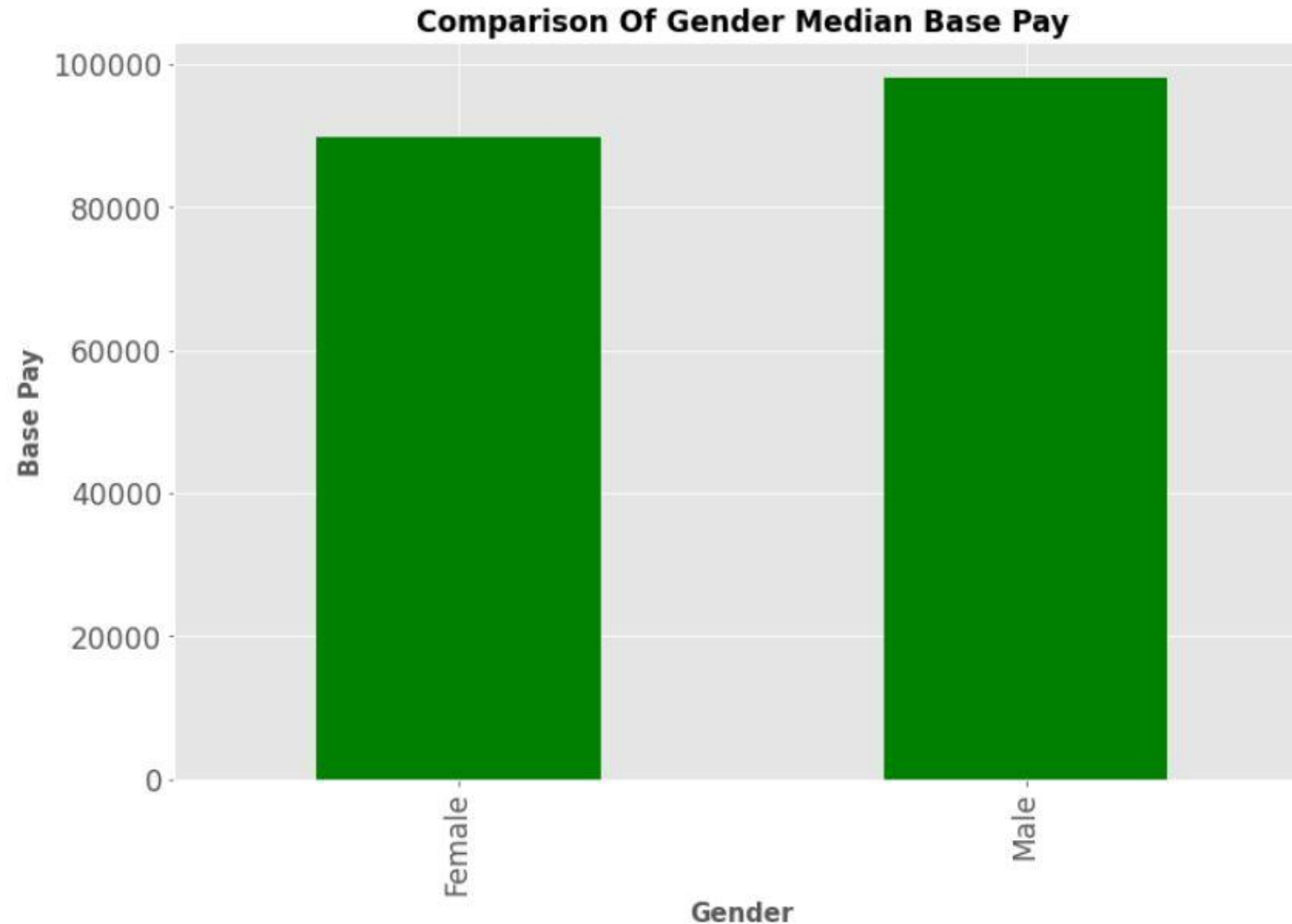
Gender Pay Gap

- Agenda

I am a HR consultant for a 5000 employee PR company....one day I received a call from a lady complaining about gender pay gap in the company.

She was referred to me to solve the problem of **perceived Gender Pay Gap**

Why is there a gender pay gap in our company?...Time for EDA!



- The gender pay gap is 8.46% or \$8300/year
- The P Value using the mean difference (between Female basepay and Male basepay) is <0.05 indicating that the pay gap is significant.
- Can we conclude the Gender Pay Gap is really 8.46%?
- No lah! We need to do EDA first!

Calm down, could you tell me more about yourselves?
May be we can do a more accurate Gender Pay Gap analysis?



Graphic
Designer

the
age
41



PhD

Amy



Financial
Analyst

the
age
49



High School

Connie



Warehouse
Associate

the
age
50

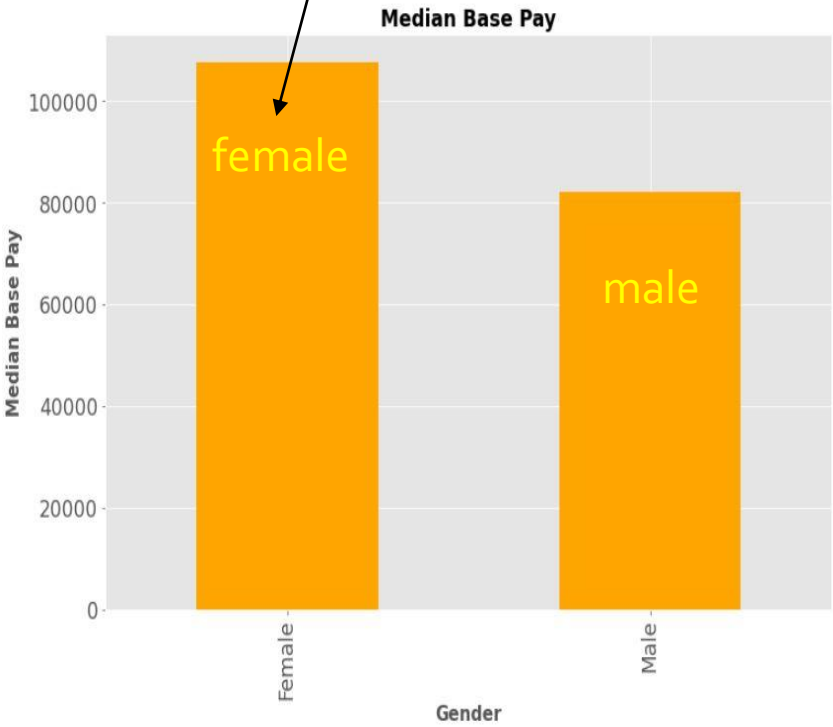


College

Sara

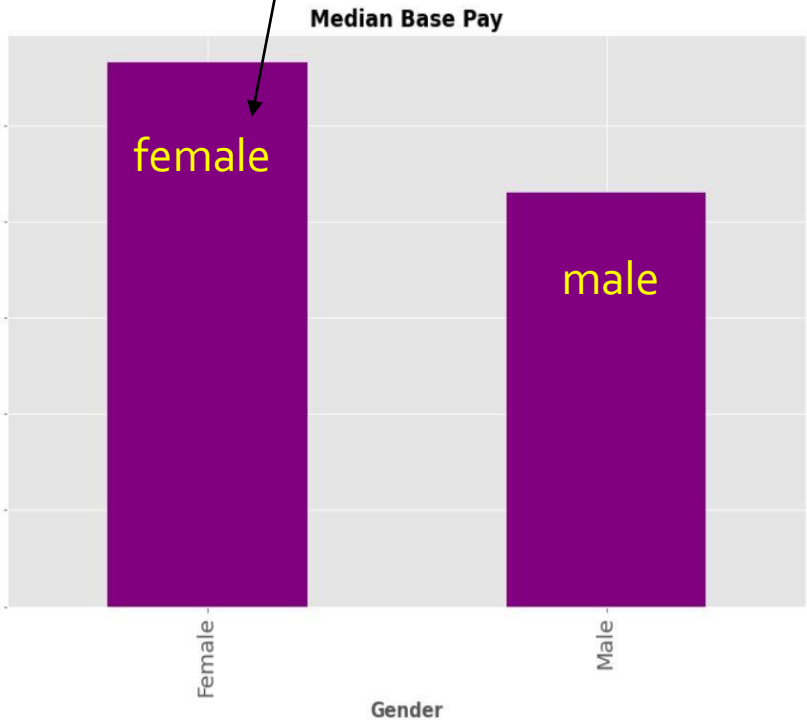
This is your gender pay gap.....better off than your male counterparts!

31%



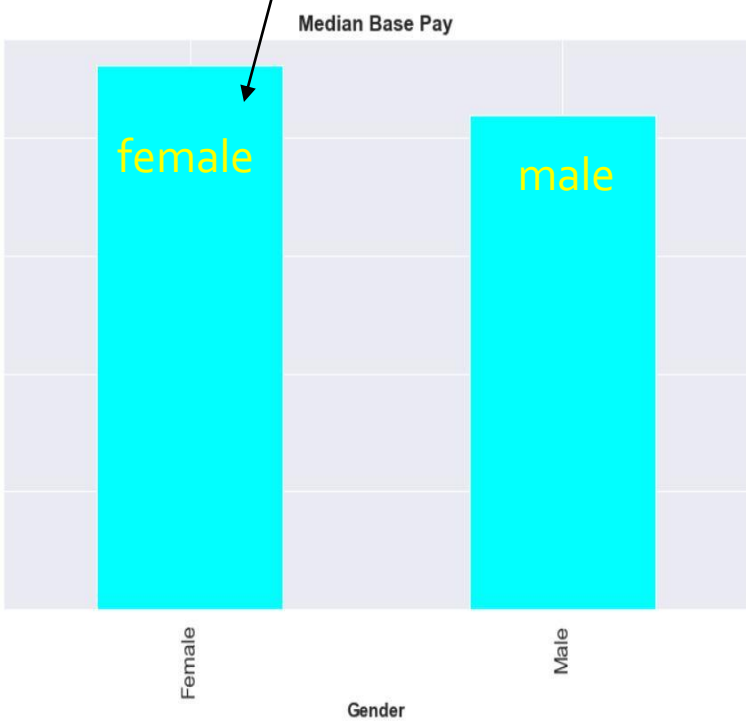
Amy

32%



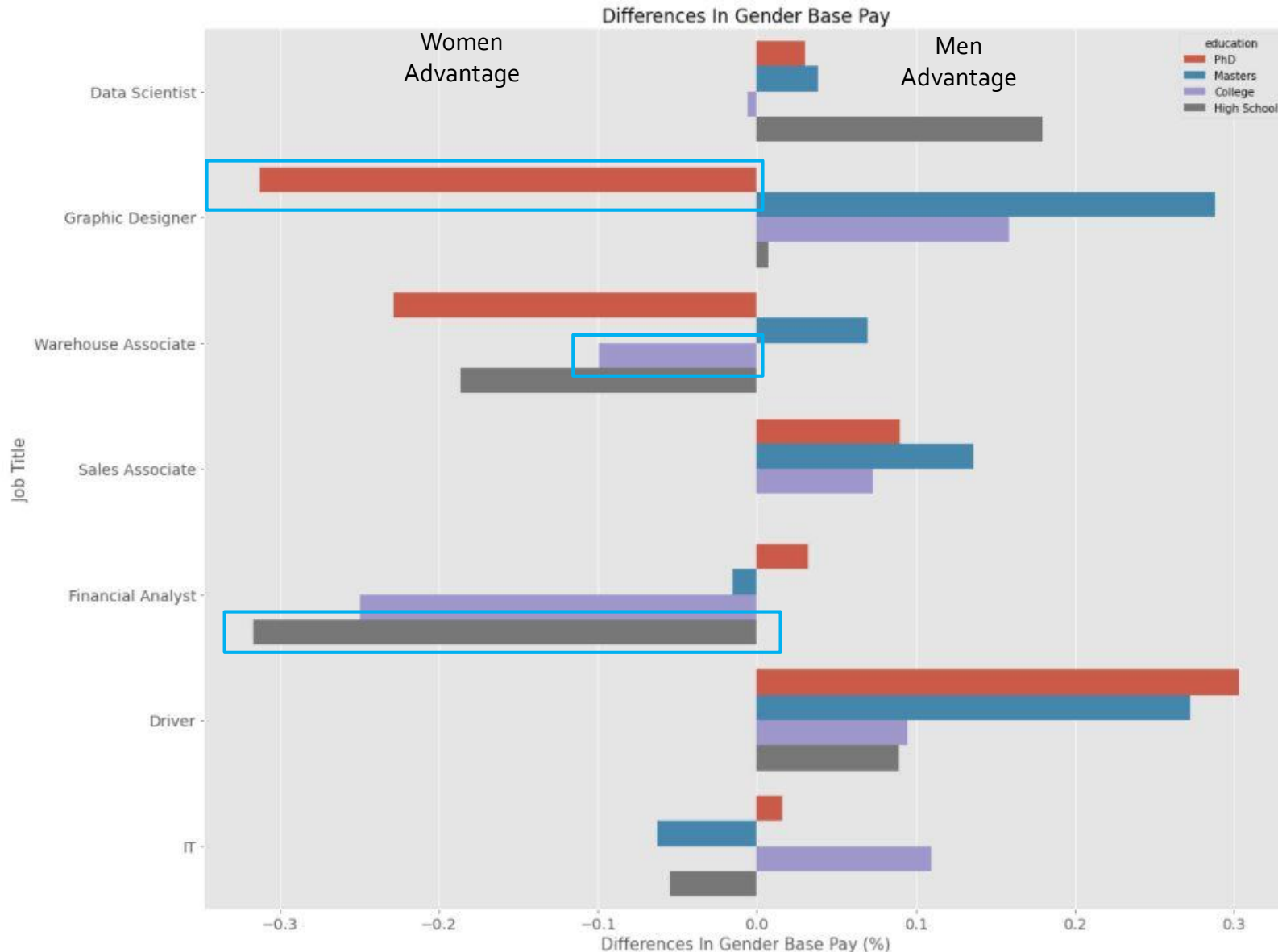
Connie

10%



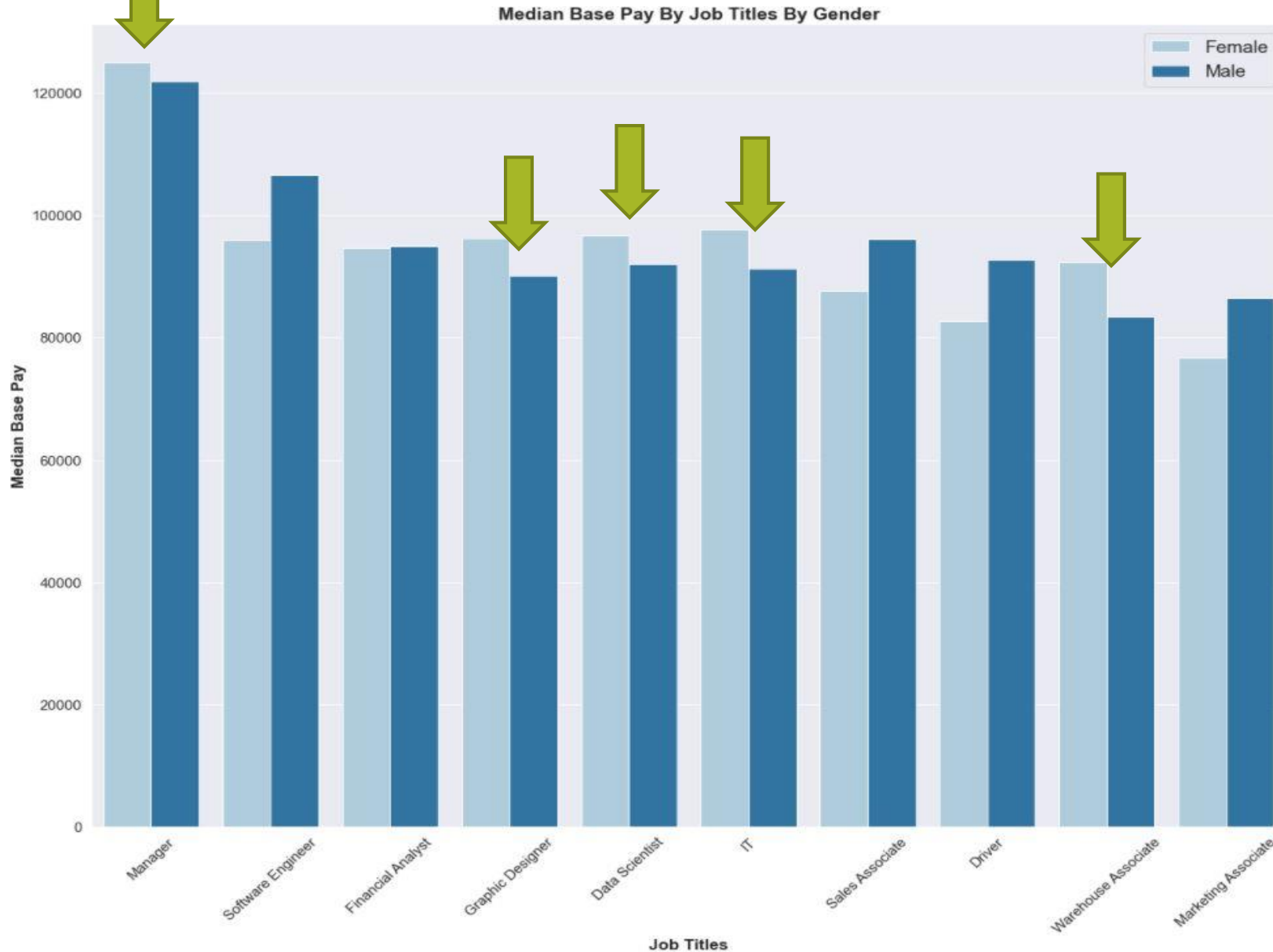
Sara

To See The Overall Picture....



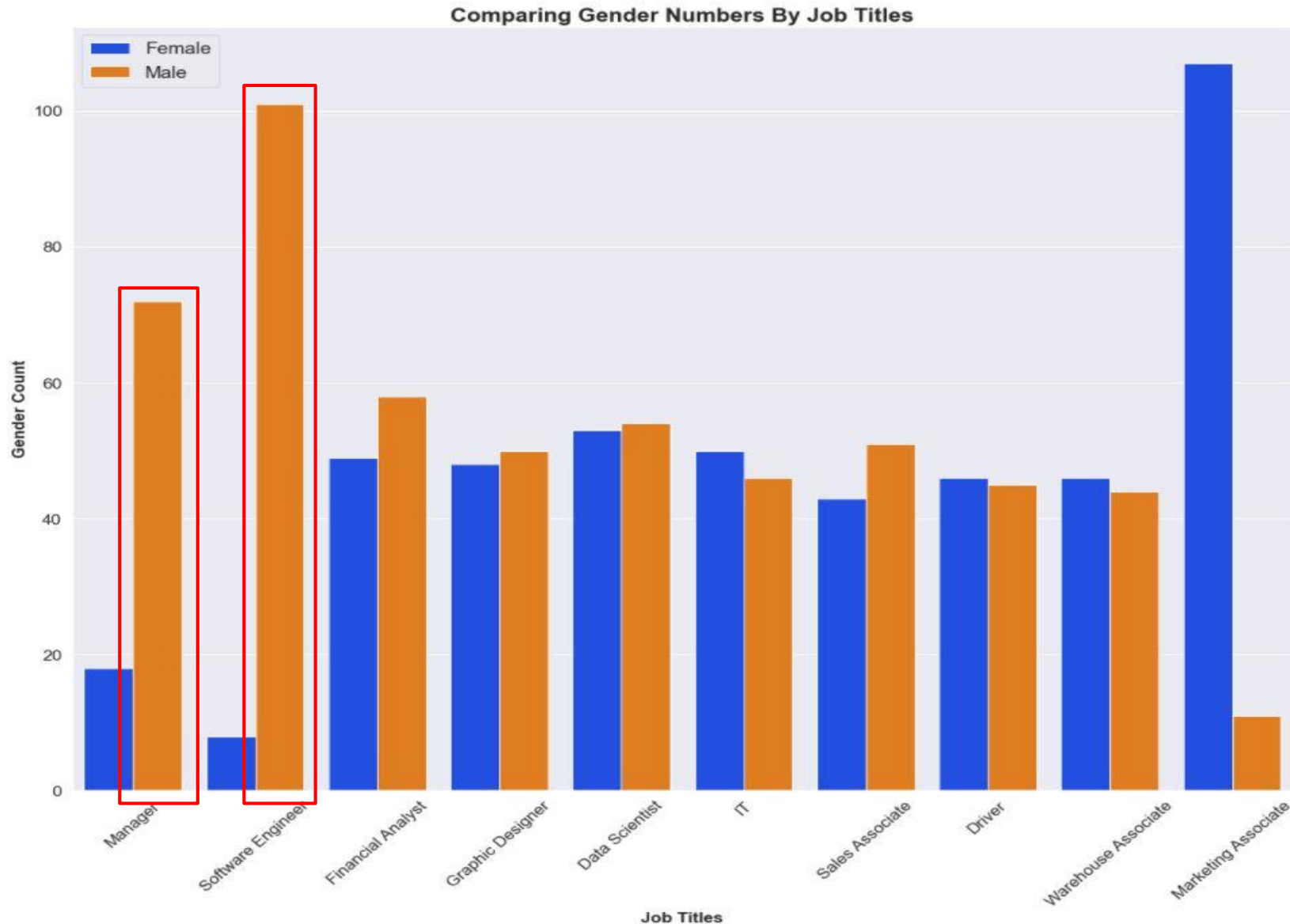
- Gender pay gap depends on education and job titles...
- For Connie who is a Financial Analyst will have a 31.7% Gender Pay Gap advantage if you have a High School education. (Red Box)
- Or Sara who is a Warehouse Associate will have a 9.9% Gender Pay Gap advantage if she's been thru college etc. (Red Box)
- Therefore if we compare Gender Pay **within similar category**, such as education, we will each arrive at different Gender Pay Gaps?

Absolutely!



- You can see that there are a fair mixture of gender pay gaps for each job category
- Women are better paid in 5 jobs
- Men are better paid in 5 jobs too!
- So where did that 8.4% Gender Pay Gap come from?

Some high paying jobs are dominated by man.....that's why



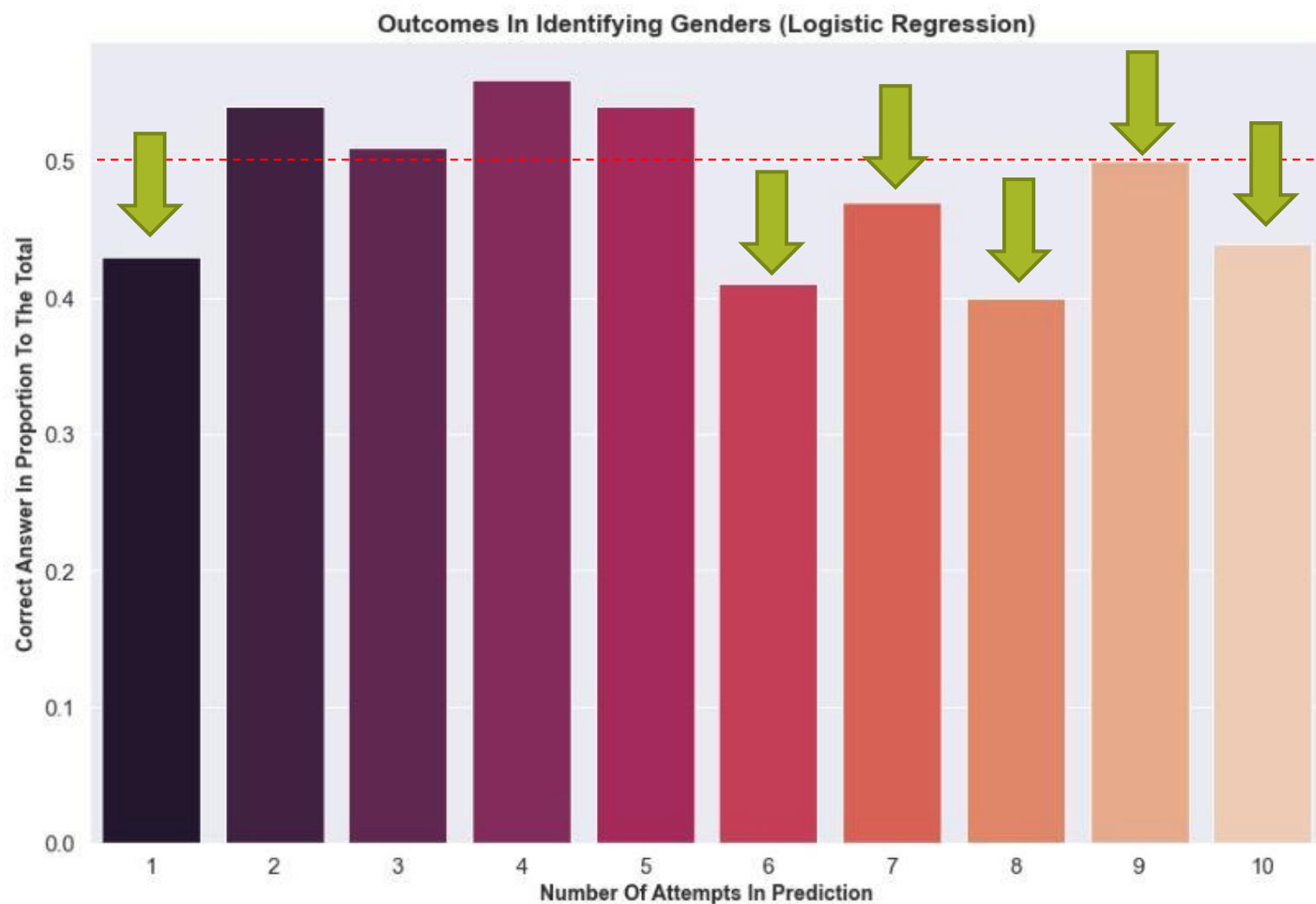
- The 2 highest paying jobs
 - Manager
 - Software Engineer.....are dominated by man
(Red Box).
- this scales up the median pay for Males..and further widening the Gender Pay Gap.
- Therefore we should really look beneath the surface before making a conclusion...correct?

But still that does not prove that the company does not have any biasness against women.....



- Why don't we play a game, we will train the computer to learn about relationships between **base pay and gender**, and after that try to identify gender. We will also include education, age and job titles.
- We will see how it fairs. OK?
- **OK. LET'S DO IT!**

RESULT : In 6 out of 10 poor success rates



↓ Success rate < 0.50

POOR SUCCESS RATE!

Criteria for correct attempts, Success rates must be > 0.5 .

Since there are 6 **incorrect** attempts to identify the correct genders, we conclude there are insufficient evidence to prove that the **gender pay gap is significant!**

So what is the gender pay gap now?

The Adjusted Gender Pay Gap is 0.65%



- Women > Men
- Women : \$92067 p.a.
- Men: \$91475.50 p.a.

THANK YOU!!!