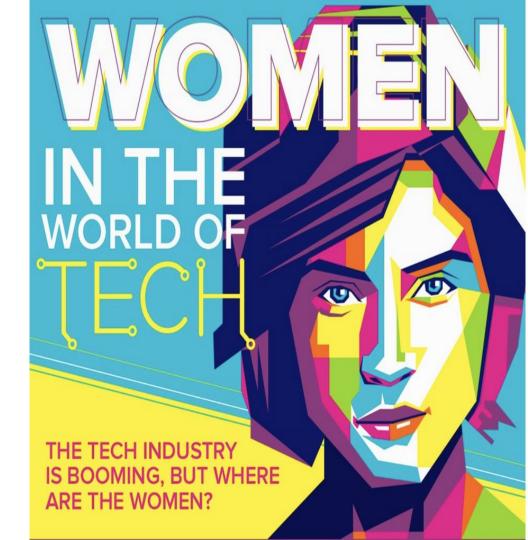
Women In Tech

July 29, 2021

Overview



Overview

Target Population of Interest: Women in Machine Learning and Data Science Technology roles in the United States who responded to annual Surveys of various sources.

According to the US Bureau of Labor Statistics, "Employment in computer and information technology occupations is projected to grow faster than the average for all occupations."

Problem Statement: Despite the growth in Technology jobs the number of Women in the United States that are occupying roles in Technology is significantly less than their Target Population of Interest: Women in Machine Learning and Data Science Technology roles in the United States who responded to annual Surveys of various sources.

According to the US Bureau of Labor Statistics, "Employment in computer and information technology occupations is projected to grow faster than the average for all occupations."

Problem Statement: Despite the growth in Technology jobs the number of Women in the United States that are occupying roles in Technology is significantly less than their male counterparts. When we look at the women's representation in the Technology roles specifically women in Software Engineering, Data Science field the gender imbalance still remains to be true. Furthermore, pay gap also exist with women making less on avarage than men. male counterparts. When we look at the women's representation in the Technology roles specifically women in Software Engineering, Data Science field the gender imbalance still remains to be true. Furthermore, pay gap also exist with women making less on average than men.

Understanding the problem

The question

When comparing men and women in similar roles, does a pay gap exist? Does years of coding experience and/or education impact the salary of women?

The Hypothesis

There There is a difference between the % in workforce and (gap in salary when compared with years of coding experienceThere There is a difference between the % in workforce and (gap in salary when compared with years of coding experience, education) women population and the men population in the United Statesis a difference between the % in workforce and (gap in salary when compared with years of coding experience, education) women population and the men population in the United States, education) women population and the men population in the United Statesis a difference between the % in workforce and (gap in salary when compared with years of coding experience, education) women population and the men population in the United States

The Method

Use Linear Regression and Random Forest to determine if a pay gap exists.

Project objective:

In Our analysis, we will compare the 2020 survey results against the previous two years surveys to determine the key differences between men & women within the dataset in order to reject the null hypythosis and conclude that gender and paygap imbalance exists. Furthermore, we will seek to understand the state of Women in Technology roles. We will utilize a Supervised Machine learning algorithm to predict salary of women in ML & DA role based on years of experience.

Measure of Success: The success of the project is dependent on the group ability to analyze the data and provide the necessary insight that speaks to the difference that exist in Technology roles and what impacts formal education and years of coding experience have on salary for women when compare to men

Are women underpaid in the field?

Model 1

Trend 1

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Client Implications:

- Incididunt ut labore et dolore
- Consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore

Trend 2

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Client Implications:

- Incididunt ut labore et dolore
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ML model 2

Trend 1

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Client Implications:

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- Consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore

Trend 2

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Client Implications:

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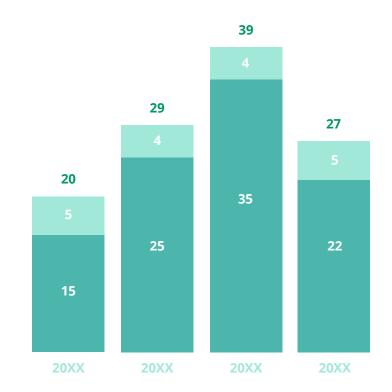
ML model 3

Findings

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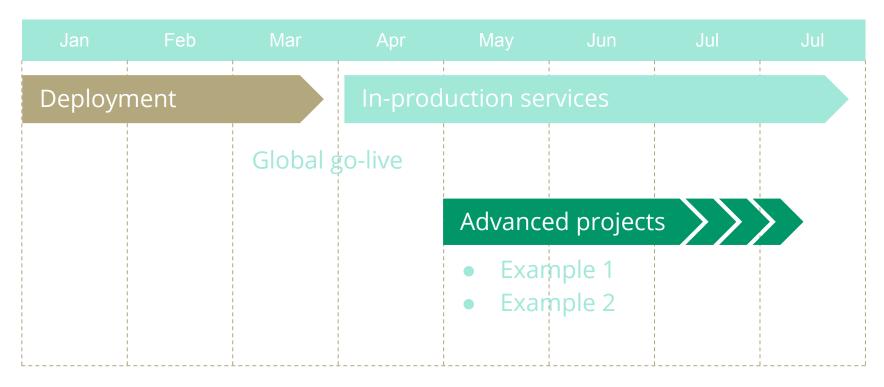


Item 2

ML model 4

Deliverable 1 Deliverable 2 Deliverable 3 Deliverable 4

Summary



The Team





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Ronny Reader, CFO

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Abby Author, CTO

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur



Berry Books, CPO

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