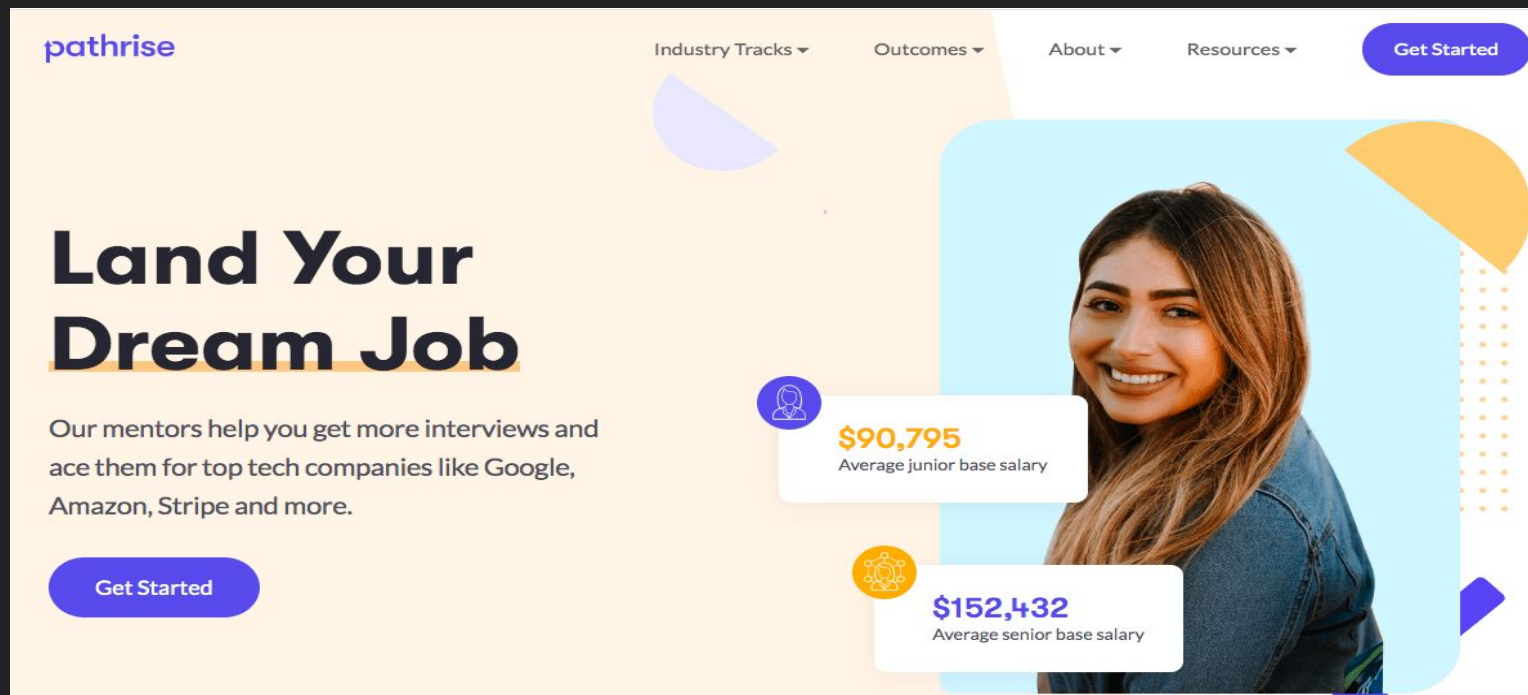


Delivering Insights on Placement of Pathrise's Fellows

By Sam Okoye

The image shows a screenshot of the Pathrise website's landing page. The page has a clean, modern design with a light orange and white color scheme. At the top, there is a navigation bar with the Pathrise logo on the left and links for 'Industry Tracks', 'Outcomes', 'About', and 'Resources' in the center. A prominent blue 'Get Started' button is located on the right side of the navigation bar. The main content area features a large, bold heading 'Land Your Dream Job' on the left. Below this heading, a paragraph states: 'Our mentors help you get more interviews and ace them for top tech companies like Google, Amazon, Stripe and more.' A blue 'Get Started' button is positioned below this text. On the right side of the main content area, there is a large, light blue rectangular graphic that serves as a background for a smiling woman with long brown hair. Overlaid on this graphic are two white callout boxes. The first box, featuring a person icon, displays '\$90,795' in bold orange text, followed by 'Average junior base salary' in smaller grey text. The second box, featuring a gear icon, displays '\$152,432' in bold blue text, followed by 'Average senior base salary' in smaller grey text. The overall layout is professional and aims to attract potential fellows by highlighting successful outcomes.

Pathrise Statement of Concern

On average, for fellows who stayed with Pathrise after their free trial period, it takes about 4 months to receive a final job offer. However, there is a lot of variation in fellows' outcomes. Being able to predict how fast every single fellow is going to find a job is crucial for Pathrise.

What Pathrise Wants

Derive insights around if a fellow will ultimately be placed at a company and how long until a placement can be expected.

Quick EDA after data cleaning

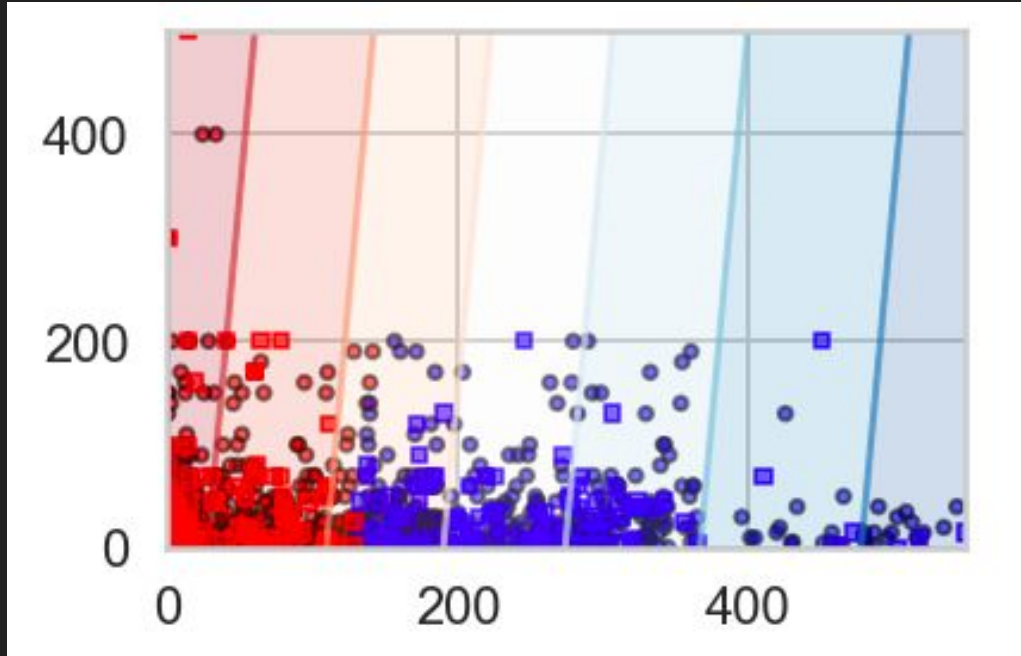
Fellows with 3+ years experience are mostly placed within the 3-5 months period

A lot of early career fellows enroll in the program.



Results from the Analysis--Logistic Regression

Best model was Black Box Grid Search with 65% accuracy predicting fellow's placement.



Key:
Blue means placed
Red means non-placed

Training and Modeling

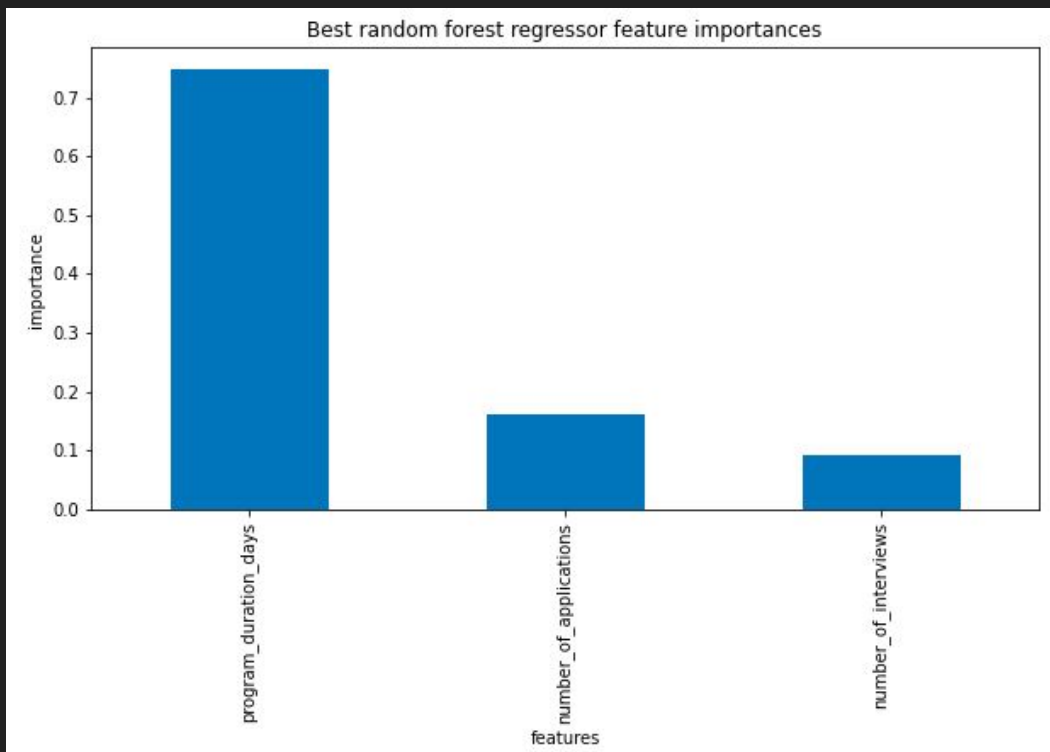
- 70% of the data were trained, and testing was done on 30%.
- 5 Models were built and tested during linear regression before choosing the best model. The tested models that performed below 65% are:
 1. Random Forest→ 43% accurate with standard deviation of ~ 0.069 .
 2. Ordinary Least Squares→ 0.3% accurate with condition number of 4.84

Training and Modeling

3. Multiple Linear Regression → 7.9% accurate, condition number of $3.84e+3$.
4. Avoiding Redundancy → 6.8% accurate, condition number of 143.

Training and Modeling

Best random forest regressor feature of importance



Order of Importance are:

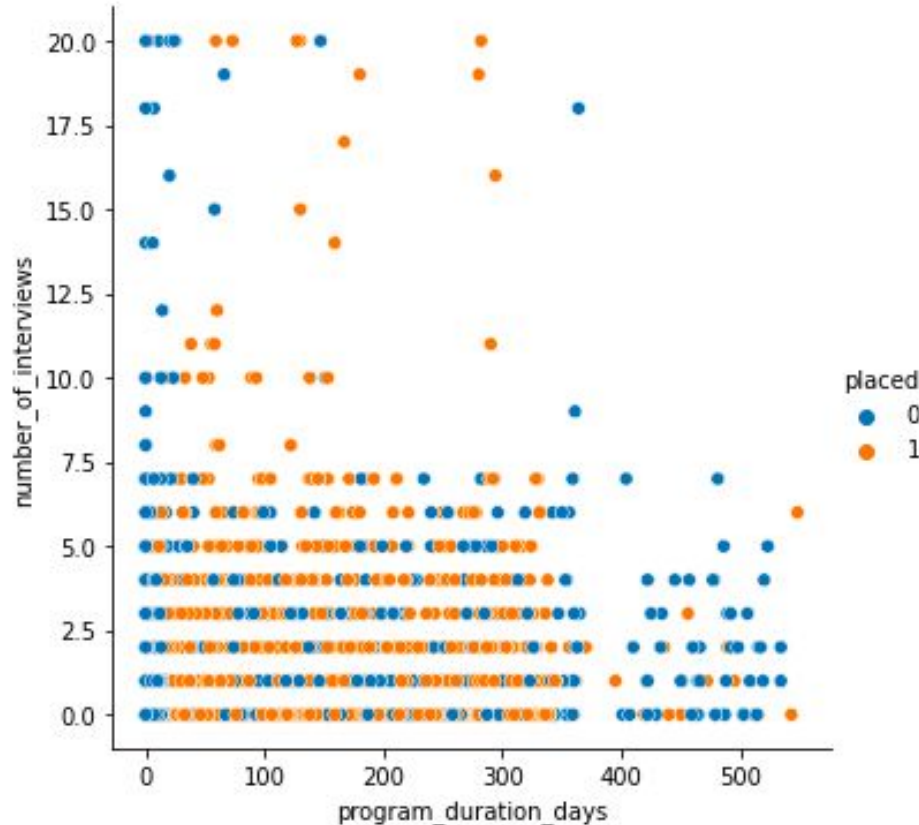
1. Program duration
2. Number of applications
3. Number of interviews

Exploratory Analysis

Relationship between number of Interview and number of applications plot

1. ~400 applications resulted in placement compared to 1000 applications by non-placed fellows.
2. Most placements happened within 1 and 11th interview.

Exploratory Analysis



Relationship between number of Interview and program duration plot

1. Most placements happened with 1 and 300 days in the program.
2. The number of interviews and placement decreases as fellows stay beyond 330 days.

Conclusion and Recommendation

- There is no one factor affecting fellows' placement at Pathrise, however having 3+ years professional experience should be highly encouraged.
- Since only 37% of fellows get placed, and the placement mostly happened within 300 days I would recommend the program be shorten to 450 days instead of 1 year.
- The dataset didn't give clues about fellows' motivation or other personal reasons that could have impacted their placements.

Recommendations

- I would recommend Pathrise tracks number of connections each fellows make. Networking seems to be one of the helping factors for landing a job.
- There was no information on the quality of resume each fellow used during the program. I would recommend Pathrise creates a tracking system for resume quality. from my experience some career coaching entities hardly know about quality of resume content. They only help job seekers with formatting.
- Provide one-on-one mentor that would go over fellows' resume before they submit it for job application. Sounds like a hard job but it will help increase the 38% of placement as we seen on this analysis.

Thank You

Thanks for listening, and special thanks to my mentors Varun Bhatia, and Luka Anicin for the unwavering support I have gotten.