

untapt Resume Clinic

NYC Data Science Academy

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May 30th, 2018



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Deep Learning

at NYC Data Science Academy

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untapt

Platform Demo

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enigma



UBS



RiskEx

CROWD
TWIST



CR Consumer
Reports™

pd prescriptive
data

CRUX



- **Consumer Reports —Data Engineer**
- CrowdTwist —Lead Data Engineer
- Crux Informatics —Data Engineer (NYC & SF)
- Enigma —Data Scientist
- NYC Hedge Fund —ML Data Scientist
- Prescriptive Data —Lead & Jr. Data Scientist
- RiskEx —NLP Engineer
- UBS —Lead Data Engineer



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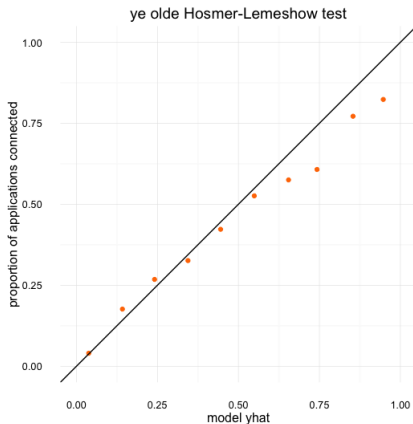


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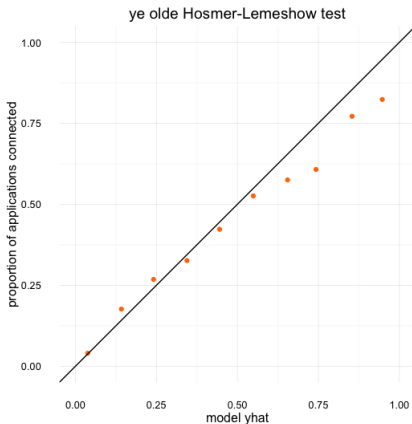
Problem Definition

- given:
 - any candidate c_i
 - any job j_i
- estimate the probability of invitation to interview



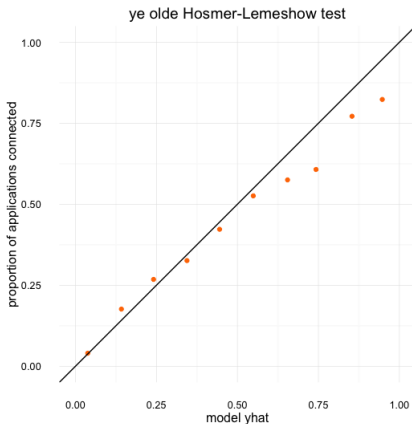
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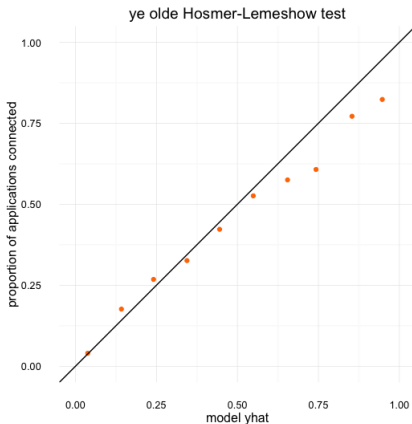
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Use Cases

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- 1 ordering applicants to sort by best- and least-qualified
- 2 suggesting the most suitable jobs for a candidate
- 3 internal mobility



Use Cases

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Data Set

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- 10^6 technologist profiles
- 10^4 decisions on job applications



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Model Architecture

Deep Learning Network

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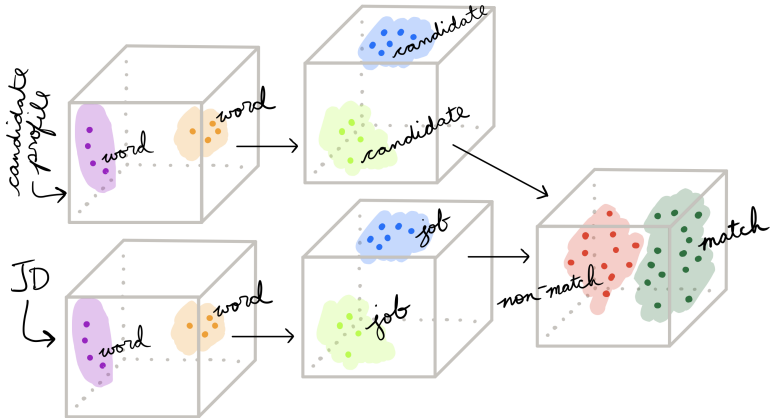
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Word Vectors

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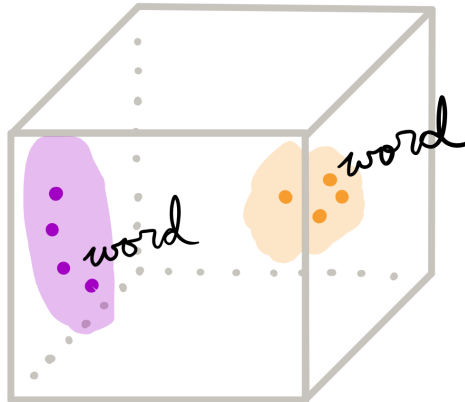
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Vector Representations of Words

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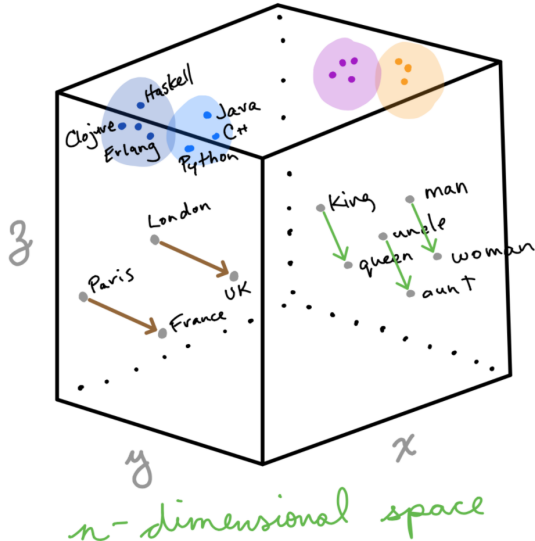
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Word Vectors

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```
Similar to Java:          j2ee, j2se, javaee, groovy, jee
Similar to Javascript:    jquery, css, html, html5, css3
Similar to Delivered:     produced, completed, presented, scoped, launched
Similar to Python + Matlab + R:  numpy, mathematica, scipy, octave, matplotlib
Similar to Python + Flask + Django:  sqlalchemy, ruby, clojure, nodejs, rails
Similar to Python + Perl + Shell:  bash, awk, ksh, scripting, jython
```



Word Vectors

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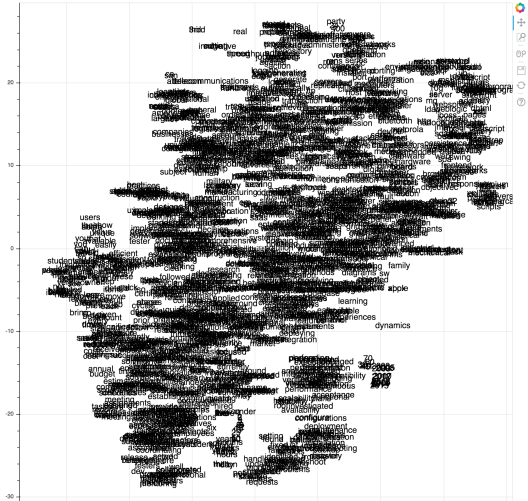
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Higher-Order Embeddings

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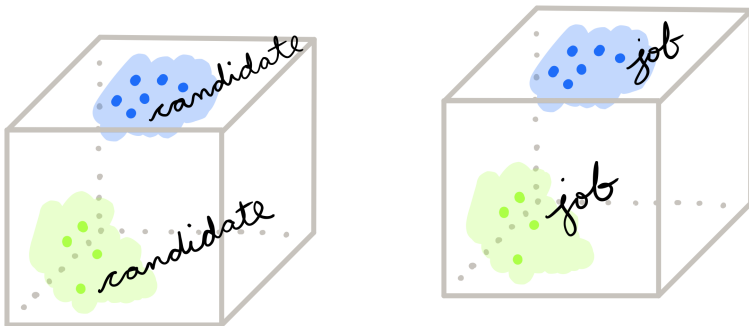
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Candidate Space

Now Showing in 3D

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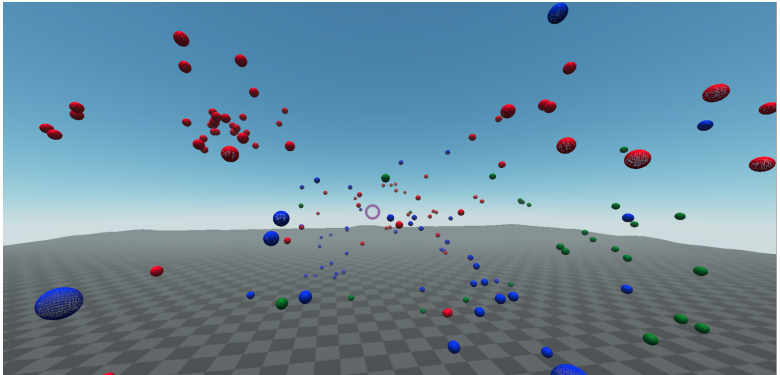
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Decision-Level Embeddings

The Highest Order

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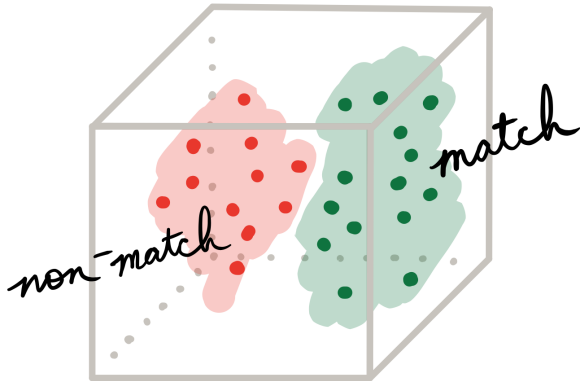
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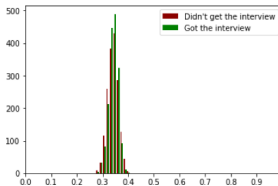
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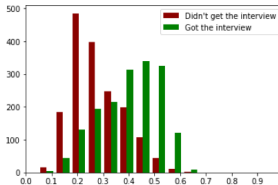
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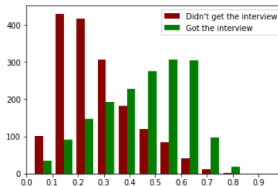
After 20 minutes of training

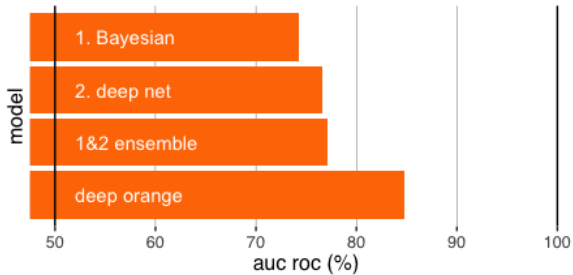


After 80 minutes of training



After 120 minutes of training





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Candidates

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- 1 **Full-Stack:** “Developed a web application in Python / Django used by thousands of customers”
- 2 *Data Scientist:* “Created machine learning models in Python and R, training with large datasets”
- 3 *DevOps:* “Responsible for cloud provisioning, infrastructure support, and maintaining Python and Shell scripts”



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“Software developer: we’re looking for an experienced Python application developer to work on our next generation framework”

- 1 *Full-Stack: 87.0%*
- 2 *Data Scientist: 53.1%*
- 3 *DevOps: 53.3%*



Job Description 1

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Job Description 2

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Discussion

“Data Scientist: our ideal candidate is a highly proficient at building machine learning models in Python, R and Matlab”

- 1 *Full-Stack: 25.5%*
- 2 *Data Scientist: 77.8%*
- 3 *DevOps: 28.8%*



Job Description 2

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Job Description 2

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Job Description 3

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Discussion

“Devops engineer: you should be an expert at managing and monitoring cloud infrastructure, confident with python, perl and shell scripting”

- 1 *Full-Stack*: 11.9%
- 2 *Data Scientist*: 45.1%
- 3 *DevOps*: 71.1%



Job Description 3

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Job Description 3

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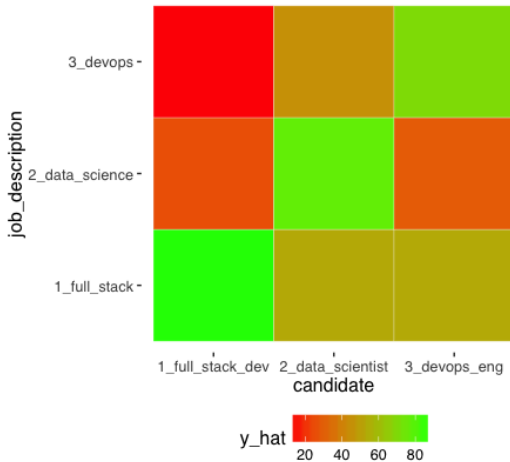
Business Impact

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“Genome” Plot

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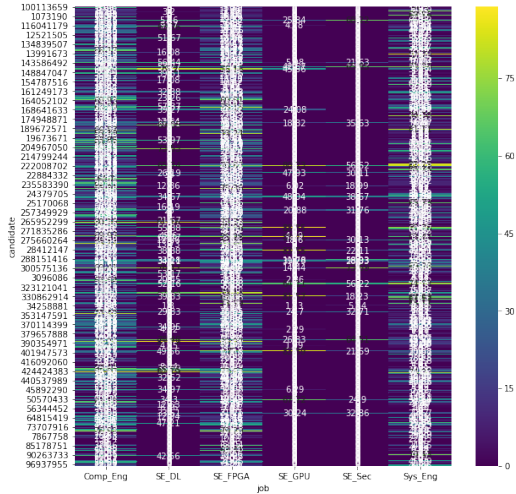
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Top Jobs

Senior Back-End Engineer



Andrew Vlahutin

Hands-on Data Scientist, Developer and Technology leader looking for a role to apply data skills to business problems

New York, NY
(347)-738-3149

Career History

2016 **Cornerstone Capital Management Holdings – Vice President Director of Technology**

December 2012 to September 2016 (3.8 years)

Strategic planning and delivery of all technology initiatives and related support for asset management firm with \$14 billion in assets under management. Provided strategic direction and oversight of team responsible for applications development, infrastructure, and end user support.

Designed and implemented a single strategic front office trading platform, Charles River IMS (CRIMS), to replace two disparate trade order management systems. Decoupled CRIMS and internal applications by adopting industry SOA and ETL best practices.

Redesigned and streamlined data feeds to increase efficiency of trading and settlement processes and eliminate redundant data reconciliation.

Skills: C#, .NET, IIS, Pentaho, MS Sql Server, SQL

2012 **J.P. Morgan Asset Management – Vice President Business Analyst and System Architect**

January 2008 to December 2012 (4.9 years)

U.S. based Accounting System replacement: Designed trade interface and data migration strategy between Eagle and front office trading systems, ensuring seamless transition to new accounting system. Global U.K. based Accounting System replacement:

Redesigned data flow between multiple trading systems, new positional data store and service provider, resulting in greater accuracy and transparency of trade flow details. Identified and resolved timing dependencies around global data across systems in the U.S., U.K. and Asia.

Data Services Architecture: Architected and built system wide SOA layer, including multiple data services and a core Enterprise Service Bus. Facilitated adoption of Big Data solutions using Splunk log integration. Championed use of development methodologies around TDD, Agile development and efficient QA testing efforts.

Skills: Java, Spring, Mulesoft, Websphere, Agile (Scrum), Sybase, IBM DB2, SQL



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Top Jobs

Senior Back-End Engineer

	Title	Client	Score
1	Java Developer	BlackRock	72.4
2	Director of Project Management	Hachette	68.0
3	VP of Technical Innovation	Texell	66.1
4	Database Engineer	WisdomTree	65.4
5	Data Analyst	Cerberus	64.5
6	CTO	Risk Priorities	63.9



Top Jobs

Front-End Engineer



Emily Kolar

Full-Stack Web and iOS App Developer

Chicago, IL
636-489-9166

Career History

Now Medean – Software Developer

April 2017 to Present (about a year)

Lead front-end engineer for the Medean peer-to-peer financial planner web application. Principal role in all stages of client-side app development, iteration, and product planning. Primary responsibilities include development of the [React/Redux](#) app, UX programming, and unit/UI/end-to-end testing. I work closely with designers to bring their awesome mockups to life, as well as with our backend engineers to develop scalable API solutions.

[JavaScript](#), [ES2015+](#), [React](#), [Redux](#), [Redux Saga](#), [CSS/SCSS](#), [Node](#), [Express](#), [Webpack/Babel](#), [Mocha/Chai/Jest/Enzyme/Testcafe](#).

2017 Wyzant – Programming Tutor

May 2016 to June 2017 (1.1 years)

Working one-on-one with students of diverse backgrounds and ages to help them learn new skills, improve existing skills, and develop a deeper and more involved understanding of programming concepts. Covered a broad range of topics including [JavaScript \(Node\)](#), [vanilla](#), [React](#), [Angular](#), [jQuery](#), [AJAX](#), etc), [Swift](#), [PHP](#), [SQL](#), [Mongo](#), API design and usage, web servers, devops.

2017 Application Visions, Inc – Software Developer

August 2016 to March 2017 (about half a year)

Technical lead for the MyDigitalGuestbook [iOS](#) app and [React/Node/Express](#) web application. Worked on a highly collaborative small-team to develop an image- and graphics-based app, alongside an admin portal and customizable checkout experience accessible the web counterpart.

[Swift](#), [CocoaTouch](#), third party libraries/APIs (e.g. [Firebase](#), [RealmSwift](#), [Stripe](#), [Dropbox](#), [Mailgun](#)), [React](#), [Node](#), [Express](#), [Webpack/Babel](#). Responsible for managing App Store submissions and reviews.



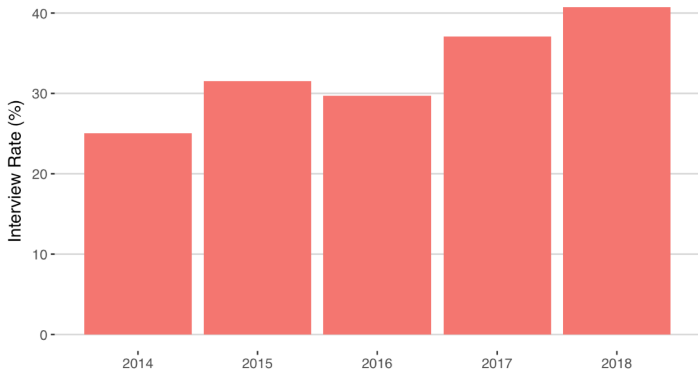
Top Jobs

Front-End Engineer

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	Title	Client	Score
1	React Developer	Citadel	90.4
2	Full Stack Engineer	Anchorage	90.4
3	Software Engineer	Say	90.3
4	JavaScript Engineer	CredSimple	90.3
5	NLP Engineer	RiskEx	90.3
6	Front End Engineer	untapt	89.7





- 1 predict success and happiness in role
- 2 recommend the correct role to the best-suited individual
- 3 build high-performance teams



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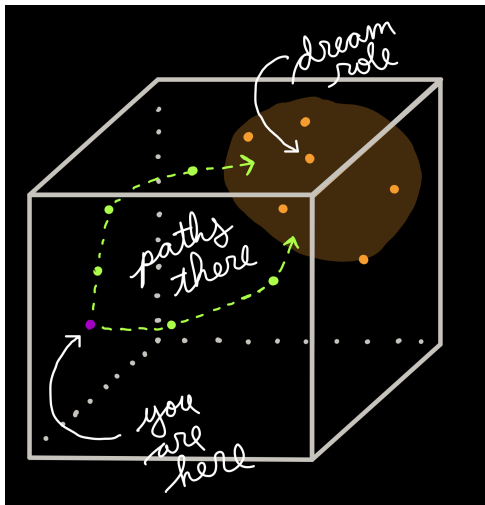
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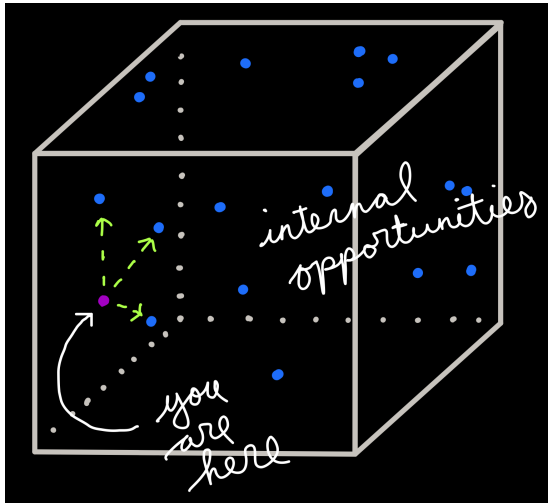
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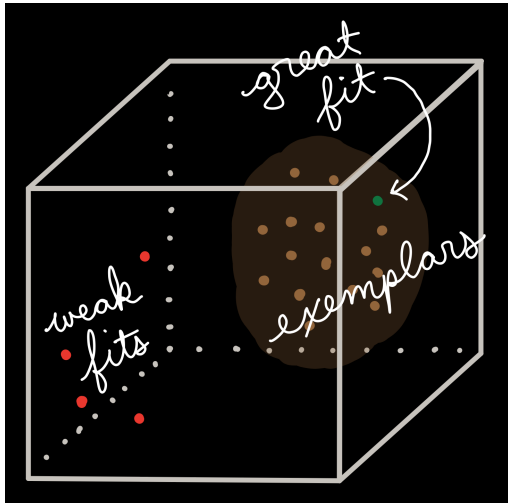
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Sam's Four Questions

Your Resume Needs to Address)

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- 1 Have you explained your skills?
- 2 What results have you achieved?
- 3 Where have you provided real examples of your work?
- 4 Do you demonstrate attention to detail?

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