

2023 Q4

Talent Market Insights Report

TOP TALENT POOL TRENDS

AI and ML Software Engineers in the U.S.

This Talent Market Insights Report investigates the current US labor market for software engineers and developers with a focus on AI and machine learning skills. Generated in October 2023, the report analyzes 600,000+ enriched profiles of real people. Product and engineering teams are being asked to quickly integrate GenAI functionality into existing products. Even companies with a hiring freeze are looking to fill roles that support and advance AI initiatives.

Use this report to understand:

- The location and diversity of the talent pool for AI/ML engineers in the U.S.
- How to find talent by verified skills including Python and cloud certifications
- Where the biggest gender gaps are by location, job title, company, and skills

According to Findem, the lowest gender gap for this talent pool by location is in San Jose, California, with 63% more men than women, compared to the Seattle area with 85%. Of top employers, Intuit has the lowest gender gap for this talent pool at 42%.

Get a custom report

When you use Findem's Talent Data Cloud to build a multi-channel talent pipeline, every search includes a talent market insights report. Use the report with hiring managers and leaders to identify talent gaps, gain competitive advantage, and proactively nurture talent.

[Request a demo](#)



MUST-HAVE

Attributes that are required by candidates within the talent pool.

NICE- TO- HAVE

Attributes that are ideal, but are not required within the talent pool.



Findem attributes are new talent data based on 3D data, person and company data over time.



Each attribute is derived from multiple data sources to search for talent beyond keywords.



These attributes were used to create this talent pool.

Q4 Talent Market Insights Report

Must Have

CURRENT ROLE (Software Engineer OR Senior Software Engineer OR Full Stack Engineer OR Web Developer OR Frontend Engineer OR Backend Engineer OR Machine Learning (ML) Engineer)

ADVANCED (Artificial Intelligence (AI) experience OR Machine Learning)

Nice to Have

MAJOR Computer Science (CS) OR Science, Technology, Engineering & Math (STEM) OR Information Technology (IT)

DEGREE Bachelor's degree OR Master's degree OR Associate's degree OR High School Diploma or equivalent

RECENT ROLE Full Stack Engineer OR Senior Software Engineer

FINDEM MAGICS Verified repositories for Java OR Verified repositories for JavaScript OR Verified repositories for Python OR Agile Certification OR Amazon Web Services Certification OR Azure Certification OR Certified Scrum Master OR Network/Security Certification OR Experience in any of the Top 50 CI/CD Tools

NICE-TO-HAVE SKILLS PYTHON* OR JAVA* OR JAVASCRIPT* OR react.js OR react OR reactjs OR kubernetes OR k8s OR docker OR containerization OR spark

PAST OR CURRENT BUSINESS MODEL Software as a Service (SaaS)

Location

LOCATION United States

MATCH POOL

The total number of candidates matching your must-have attributes. Including all filtered matches.

GENDER & ETHNICITY

The diversity and inclusion attributes are based on probabilistic models derived from multiple data sources and are not self-identified.

TOP LOCATIONS

The top locations of candidates in this talent pool who have a location listed on their profile.

TOP TIMEZONES

The top timezones of candidates in this talent pool based on the location listed on their profile.

FINDEM MAGIC

Findem curated attributes that help identify unique candidates from within the talent pool.



Start a conversation with a hiring manager about the available talent pool.

Key Insights of Your Search

608.9k
Match Pool
(Incl. filtered matches)

Gender

Women (18%) Men (81%) Unknown (0%)

Ethnicity

Caucasian (44%) Asian (35%) African American (2%) Hispanic (5%) Middle Eastern (1%)



Top 5 Locations

LOCATION	MATCHES
1. United States	608.9k

Top 5 Timezones*

TIMEZONE	MATCHES
1. Pacific Time	2.5k
2. Eastern Time	1.3k
3. Central Time	652
4. Mountain Time	281
5. America/Detroit	43

Data sampled from top 10,000 profiles

Findem Magic Attributes

 2.4k

Saw a successful exit



Candidates who have been part of a company's journey from its seed stage or Series A funding round through to its initial public offering (IPO), often showcasing their experience in growing and taking companies public.

 25.0k

Founded a company



Candidates who have previously founded one or more companies or startups.

 25.3k

Have a PhD



Candidates with a PhD.

 3.3k

Have a Blog



Candidates who maintain a blog, often used to share their thoughts, expertise, or experiences on various topics.

 387.7k

Long-tenured



 13.4k

Have a personal



 103.8k

Have startup



 221.7k

Completed



TOP EMPLOYERS

The top companies of candidates in this talent pool who have a company associated with their current position on their profile.

TOP EMPLOYERS BY FUNDING STAGE

The distribution of candidates in this talent pool based on the funding stage of their current employers.

TOP SCHOOLS

The top schools of candidates in this talent pool who have a school associated with their profile.

TOP SKILLS

The top skills of candidates in this talent pool who have a skill listed in the skills section of their profile.

Calibrate your search to hone in on key companies, skills, and schools.

Key Insights of Your Search (Data sampled from top 10,000 profiles)

Top Employers

COMPANIES	MATCHES	
1. Microsoft	277	
2. Amazon	232	
3. Google	199	
4. Apple	110	
5. Capital One	102	

Top Skills

SKILLS	MATCHES	
1. Java	3.9k	
2. Javascript	3.9k	
3. Sql	2.9k	
4. Python	2.8k	
5. Html	2.5k	

Top Schools

SCHOOLS	MATCHES	
1. Georgia Institute Of Te	183	
2. San Jose State Univer	165	
3. University Of Southern	122	
4. University Of Mumbai	104	
5. University Of California	96	

Top Employers by Funding Stage

FUNDING STAGE	MATCHES	
1. Public	3.8k	
2. Late Stage	467	
3. Mid Stage	464	
4. Early Stage	309	

MATCHES

The number of candidates who fall under one of the overall experience buckets. A candidate's overall experience is calculated as the sum of all work experiences mentioned on their profile.

WOMEN % VS MEN %

The estimated percentage of Women or Men employees within this talent pool. The gender attribute is based on probabilistic models derived from multiple data sources and is not self-identified.

GENDER GAP

The difference between the estimated percentage of Women and Men employees within this talent pool. Those with a lower gender gap are closer to a 50/50 gender split. A positive gap indicates more women than men; a negative gap indicates more men than women.

TOP EXPERIENCE

The experience range of the largest number of candidates in this experience.



Compare years of experience required to talent available.

Matches by Overall Experience

Total Matches (608.9k) Matches by Overall Experience



COMPANY GROWTH RATE

The percentage change in revenue of the company for this year, compared to the revenue of the company one year prior.

MATCHES

The number of candidates with a current position at a company that falls under one of the growth rates buckets.



Match growth experience to expectations for the role at your company.

Matches by Company Growth Rate

● Total Matches (608.9k) ● Matches by Company Growth Rate

Less Than 0% Growth

 **7%** (43.2k)

0% - 2% Growth

 **3%** (20.7k)

2% - 15% Growth

 **17%** (109.6k)

More Than 15% Growth

 **24%** (149.1k)

COMPANY EMPLOYEE SIZE

Company employee size is determined by the total number of candidates having a current position at the company.

MATCHES

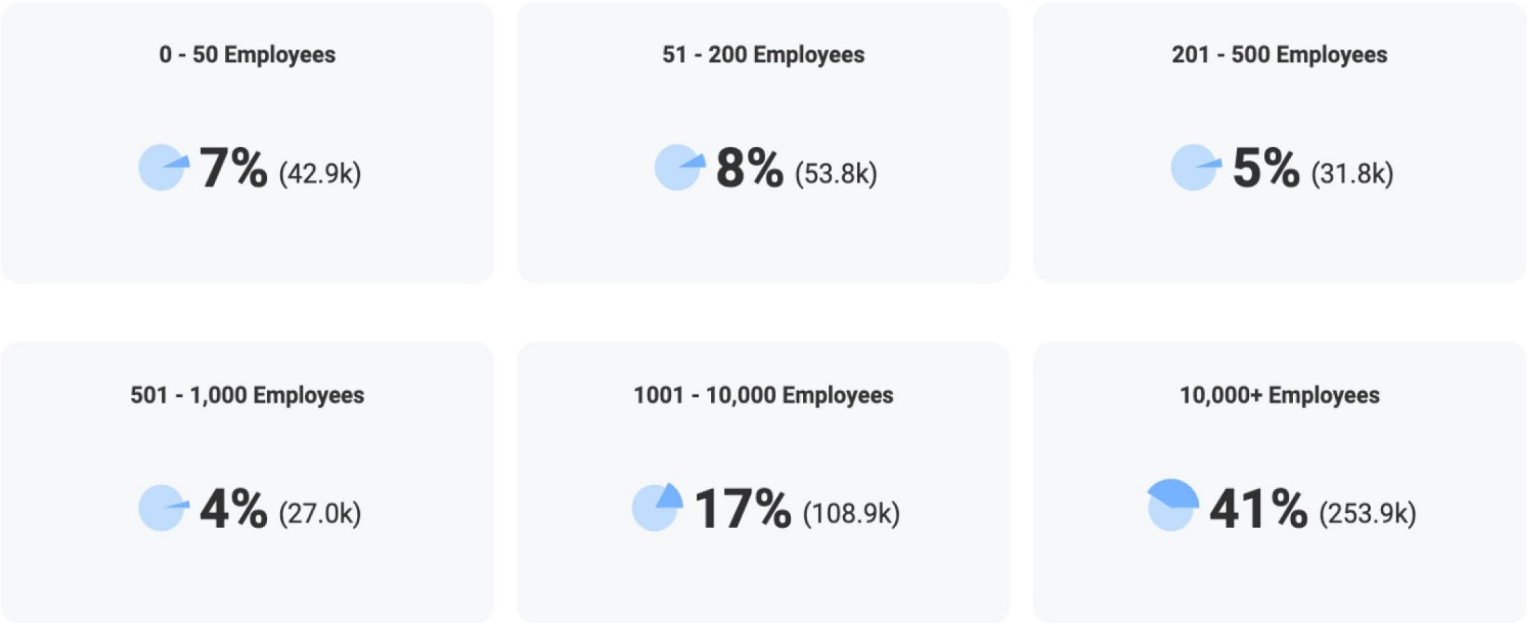
The number of candidates with a current position at a company that falls under one of the growth rates buckets.



Improve response rates by shortlisting by company size experience.

Matches by Company Employee Size

Total Matches (608.9k) Matches by Company Employee Size



LOCATION

Location is determined by the current location of the candidate.

MATCHES

The number of candidates at each location. A candidate's location is determined by the current location on their profile.

WOMEN % VS MEN %

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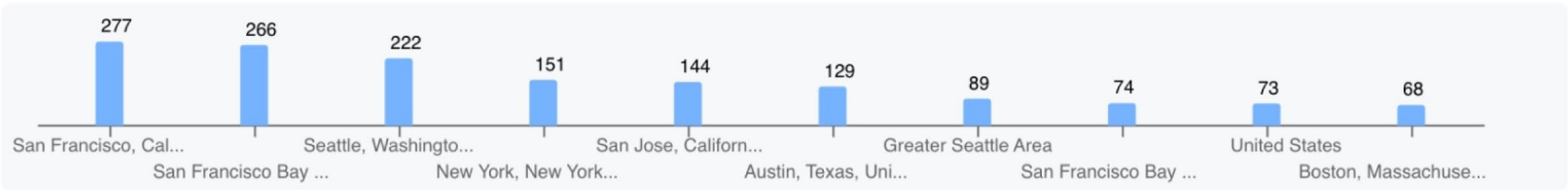
TOP EMPLOYER

The company with the largest number of candidates in this location.

TOP EXPERIENCE

The experience range of the largest number of candidates in this location.

Matches By Location (Data sampled from top 10,000 profiles)



TOP 10 LOCATIONS	MATCHES	WOMEN % MEN %	GENDER GAP	TOP EXPERIENCE	TOP COMPANY
San Francisco, California, United States	277	13% 85%	-72%	11 Years	Airbnb
San Francisco Bay Area	266	14% 85%	-71%	11 Years	Google
Seattle, Washington, United States	222	11% 88%	-77%	8 Years	Amazon
New York, New York, United States	151	17% 81%	-64%	9 Years	Google
San Jose, California, United States	144	18% 81%	-63%	7 Years	Adobe
Austin, Texas, United States	129	10% 89%	-79%	9 Years	Amazon
Greater Seattle Area	89	7% 92%	-85%	8 Years	Microsoft
San Francisco Bay Area, United States	74	16% 83%	-67%	11 Years	Google
United States	73	16% 82%	-66%	10 Years	Microsoft
Boston, Massachusetts, United States	68	8% 91%	-83%	7 Years	Datadog

JOB TITLE

List of the most common job titles. Job titles are determined by the title listed on the candidate's current position on their profile.

MATCHES

The number of candidates who have this job title listed on the current position on their profile.

WOMEN % VS MEN %

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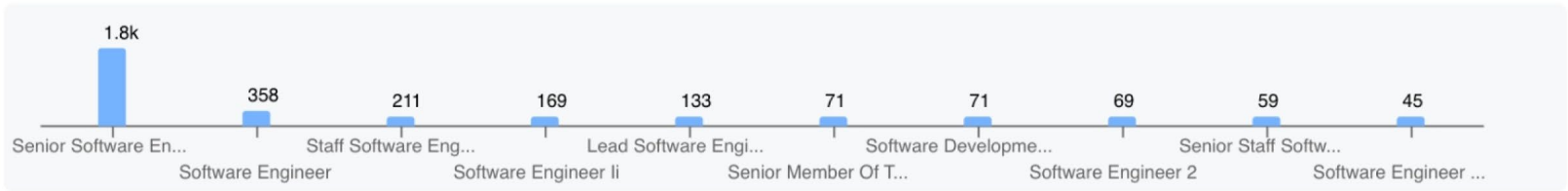
TOP EXPERIENCE

The experience range of the largest number of candidates with this title.



Consider job titles that might increase or decrease the gender gap.

Matches By Job Title (Data sampled from top 10,000 profiles)



TOP 10 JOB TITLES	MATCHES	WOMEN % MEN %	GENDER GAP	TOP EXPERIENCE	TOP COMPANY
Senior Software Engineer	1.8k	11% 87%	-76%	11 Years	Microsoft
Software Engineer	358	13% 86%	-73%	7 Years	Google
Staff Software Engineer	211	5% 94%	-89%	9 Years	Google
Software Engineer II	169	14% 84%	-70%	8 Years	Microsoft
Lead Software Engineer	133	9% 90%	-81%	13 Years	Capital One
Senior Member Of Technical Staff	71	14% 85%	-71%	7 Years	VMware
Software Development Engineer II	71	12% 87%	-75%	8 Years	Amazon
Software Engineer 2	69	24% 75%	-51%	8 Years	Microsoft
Senior Staff Software Engineer	59	8% 91%	-83%	14 Years	Google
Software Engineer III	45	26% 73%	-47%	6 Years	Google

COMPANY

Company is determined by the current positions a candidate has listed on their profile.

MATCHES

The number of candidates with a current position at this company listed on their profile.

WOMEN % VS MEN %

The estimated percentage of Women or Men employees within this talent pool. The gender attribute is based on probabilistic models derived from multiple data sources and is not self-identified.

GENDER GAP

The difference between the estimated percentage of Women and Men employees within this talent pool. Those with a lower gender gap are closer to a 50/50 gender split. A positive gap indicates more women than men; a negative gap indicates more men than women.

TOP EXPERIENCE

The experience range of the largest number of candidates in this company.

Matches By Company (Data sampled from top 10,000 profiles)



SCHOOLS

The schools a candidate has listed in the education section of their profile.

MATCHES

The number of candidates who fall under one of the overall experience buckets. A candidate's overall experience is calculated as the sum of all work experiences mentioned on their profile.

WOMEN % VS MEN %

The estimated percentage of Women or Men employees within this talent pool. The gender attribute is based on probabilistic models derived from multiple data sources and is not self-identified.

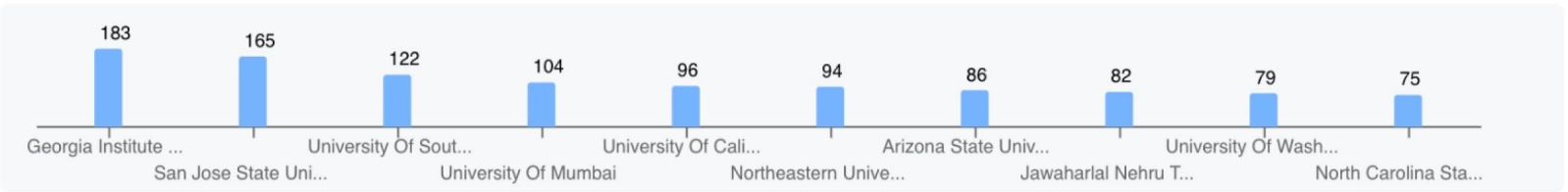
GENDER GAP

The difference between the estimated percentage of Women and Men employees within this talent pool. Those with a lower gender gap are closer to a 50/50 gender split. A positive gap indicates more women than men; a negative gap indicates more men than women.

TOP EXPERIENCE

The experience range of the largest number of candidates from this school.

Matches By School (Data sampled from top 10,000 profiles)



TOP 10 SCHOOLS	MATCHES	WOMEN % MEN %	GENDER GAP	TOP EXPERIENCE	TOP COMPANY
Georgia Institute Of Technology	183	8% 91%	-83%	9 Years	Microsoft
San Jose State University	165	15% 84%	-69%	7 Years	Amazon
University Of Southern California	122	21% 77%	-56%	9 Years	Google
University Of Mumbai	104	12% 87%	-75%	8 Years	Microsoft
University Of California, Berkeley	96	14% 85%	-71%	11 Years	Google
Northeastern University	94	13% 84%	-71%	8 Years	Microsoft
Arizona State University	86	18% 81%	-63%	8 Years	Microsoft
Jawaharlal Nehru Technological Un	82	8% 91%	-83%	11 Years	Amazon
University Of Washington	79	16% 83%	-67%	8 Years	Microsoft
North Carolina State University	75	13% 86%	-73%	8 Years	Microsoft



Consider schools for recruitment programs to close the gender gap.

DEGREE

The degrees a candidate has listed in the education section of their profile.

MATCHES

The number of candidates who fall under one of the overall experience buckets. A candidate's overall experience is calculated as the sum of all work experiences mentioned on their profile.

WOMEN % VS MEN %

The estimated percentage of Women or Men employees within this talent pool. The gender attribute is based on probabilistic models derived from multiple data sources and is not self-identified.

GENDER GAP

The difference between the estimated percentage of Women and Men employees within this talent pool. Those with a lower gender gap are closer to a 50/50 gender split. A positive gap indicates more women than men; a negative gap indicates more men than women.

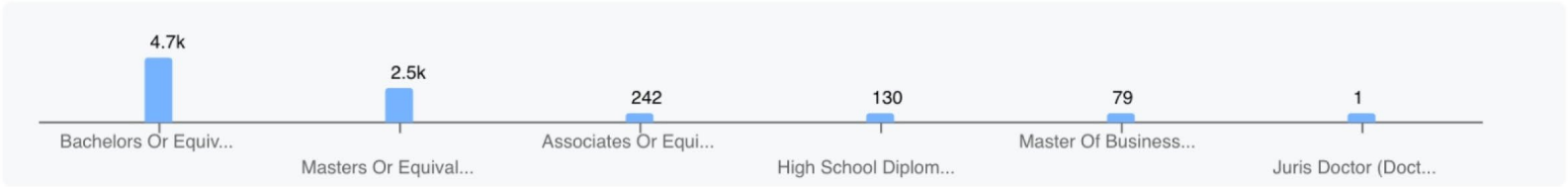
TOP EXPERIENCE

The experience range of the largest number of candidates having this degree.



Uncover the degree sweet spot for your desired talent pool.

Matches by Degree (Data sampled from top 10,000 profiles)



TOP 10 DEGREE	MATCHES	WOMEN % MEN %	GENDER GAP	TOP EXPERIENCE	TOP COMPANY
Bachelors Or Equivalent	👤 4.7k	12% 87%	-75%	10 Years	Microsoft
Masters Or Equivalent	👤 2.5k	13% 85%	-72%	10 Years	Microsoft
Associates Or Equivalent	👤 242	7% 92%	-85%	10 Years	Microsoft
High School Diploma Or Equivalent	👤 130	6% 92%	-86%	9 Years	Amazon
Master Of Business Administration	👤 79	6% 92%	-86%	9 Years	Oracle
Juris Doctor (Doctor Of Law / Juris Doctor)	👤 1	0% 100%	-100%	13 Years	Elastic

Findem's Talent Data Cloud brings sourcing, CRM, and analytics all into one place, powered by 3D data. With Findem your team can plan better, decide faster, hire right, and deliver more value to your business. Contact us to request a demo today!

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