

RECRUITMENT TECHNOLOGY

Directory of AI Tech for the TA Process

Updated August 2021

levelup[®]

How Can Businesses Use AI to Adapt to the Talent Trends of 2021?



DIVERSITY, EQUITY, AND INCLUSION



3 in 4

employees & job seekers

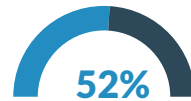
report that when evaluating companies, **diverse workforce is an important factor**

Source: Peakon, [The Employee Expectations Reward 2020](#)

One of the most significant and positive changes to come out of 2020 was companies making diversity, equity, and inclusion (DE&I) a board-level priority. Additionally, candidates are considering a company's commitment to DE&I in their decision process.

AI-powered matching and assessment tools can decrease human biases in the source and screen stage by automating these steps entirely, concealing applicants' demographic information before they are presented to recruiters, and enabling blind assessments.

CANDIDATE EXPERIENCE



of HR professionals

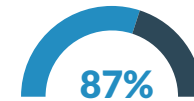
struggle to **identify the right talent from a large candidate pool**

Source: Hackernoon, [How to Use Artificial Intelligence In Talent Acquisition](#)

In today's candidate-driven market, the most qualified candidates can afford to be highly selective about where they want to work. With organizations across the globe competing for the best talent, creating a positive candidate experience is crucial to any talent strategy.

AI can be highly beneficial to candidate experience, from providing applicants with instant answers using AI chatbots, initiating highly personalized conversations, automating interview scheduling, and more while managing a high volume of applicants.

REMOTE WORK



of professionals

want to stay remote at least half of the time, even after it's safe

Source: LinkedIn Talent Blog, [The Critical Hybrid Work Issue That Companies Should Tackle Now](#)

As businesses reorient their workforces to remote work, they're also exploring ways to incorporate AI into the hiring lifecycle to streamline repetitive tasks and augment capabilities.

AI can benefit remote candidate selection through interviewing analytics, behavioral assessments, and AI-powered proctoring tools that detect plagiarism. Additionally, chatbots can be used to gather information about each candidate's ability to work remotely, their geographic location, and so on.

Resource Overview

The following resource provides an overview of suppliers that are offering AI services relevant to each stage of the talent cycle. Talent Tech Labs' [Talent Acquisition \(TA\) Ecosystem 9.0](#), publicly available information, as well as tech tools used by LevelUP Human Capital Solutions have guided the development of this list.



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Job Boards



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[CareerBuilder](#)

- AI Job Posting tool and Candidate Appeal Score provide insight on job post attractiveness and recommendations on boosting appeal; language assessment tools aid recruiters in writing gender and tone neutral job postings to speed up engagement and increase diversity and inclusion efforts. ¹

[ZipRecruiter](#)

- ▶ AI leverages data from candidates and current employees to determine if someone might be a good match for an open role; high-quality candidates are surfaced automatically, making identifying top talent more efficient and scalable. ²

¹ “CareerBuilder Unveils Advanced AI-Based Talent Acquisition Platform for Employers and Job Seekers, Turning the Industry on Its Head while Addressing Diversity” Career Builder, press.careerbuilder.com/2019-10-01-CareerBuilder-Unveils-Advanced-AI-Based-Talent-Acquisition-Platform-for-Employers-and-Job-Seekers-Turning-the-Industry-on-Its-Head-while-Addressing-Diversity

² The AI Advantage: A Guide To A Smarter Recruitment Strategy, 2020, <https://static.ziprecruiter.com/pdf/whitepapers/ZipRecruiter-ai-smarter-recruitment-wp.pdf>

Social Search



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[AmazingHiring](#)

- ▶ Utilizes AI sourcing technology to collect candidate information across various major social networks and professional communities, including Github, StackOverflow, Kaggle, and more; produces one profile per candidate.³

[Entelo Envoy](#)

- ▶ AI, machine learning algorithms, and predictive analytics sort through high volumes of talent to determine best-fit candidates for open roles.⁴

[Fetcher](#)

- ▶ AI-powered platform learns the company's candidate preference and can identify top accordingly. Automates initial outreach emails, while the recruiter handles further conversation—leading to a “human in the loop” approach.⁵

[Hiretual](#)

- ▶ Sources across 45+ platforms provides access to 750M+ candidate profiles to improve contact-finding rate. AI-powered search filters and prioritization reveal the strongest candidates; enables recruiters to build targeted searches by industry to uncover niche and hard-to-find profiles.^{6,7}

³ "Find Talent with AmazingHiring Sourcing Platform," AmazingHiring, amazinghiring.com/

⁴ "AI Recruiting Software: Envoy," Entelo, entelo.com/products/envoy/

⁵ "Fetcher Review 2021," G2, g2.com/products/fetcher-fetcher/reviews

⁶ "Recruit Top Tier Talent with Confidence Using Hiretual, the Industry-Leading Talent Data System," Hiretual, explore.hiretual.com/hiretual-vs-our-competitors

⁷ "Talent Sourcing Tool for Recruiters," Hiretual, hiretual.com/features/sourcing/

SOURCE



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FEATURES

[SeekOut](#)

- ▶ AI matching returns the best-fit talent for open roles, with results that improve over time according to user feedback on candidates returned; candidate cloning feature enables recruiters to find others similar to their preferred candidates.^{8,9}

[Talenya](#)

- ▶ AI-powered diversity sourcing solution that empowers the user to remodel job descriptions, enrich user profiles, and build prioritized lists of highly-matched candidates; diversity AI Engine™ suggests changes that can be made to job requirements to attract diverse candidate pools; AI Recommendation Engine predicts and presents qualified candidates while ensuring representation of all talent.¹⁰

[Upsider](#)

- ▶ AI-based scoring engine analyzes millions of variables to find significantly more candidates without sacrificing quality; results are adjusted based on your patterns in candidate selection and engagement results.¹¹

8 "How can I clone a "perfect" candidate?" SeekOut, support.seekout.io/hc/en-us/articles/360053596132-How-can-I-clone-a-perfect-candidate-

9 "AI Recruiting - Talent 360," SeekOut, seekout.com/solution/ai-search/

10 "#1 Diverse Talent Sourcing Solution," Talenya, talenya.com

11 "Upsider.ai - AI Sourcing," Upsider, upsider.ai/feature/sourcing

CV Matching



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FEATURES

[DaXtra](#)

- ▶ CV matching software with semantic search capabilities across in-house and online talent communities; quickly discovers relevant candidates using natural language semantic meta-search technology to search, filter, and sort data from job boards, online networking sites and CRM databases. Aggregates searches and integrates with your CRM database.¹²



Candidate Communication and Conversation Bots

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AllyO	<ul style="list-style-type: none">▶ End-to-end conversational AI engages qualified candidates, gathers latest or missing profile information, and contacts job seekers with best-fit opportunities to determine interest and encourage entry into the recruiting process; 94% of candidates complete their conversation with AllyO.¹³
Emissary	<ul style="list-style-type: none">▶ Chatbot tool screens candidates to ensure they meet the minimum qualifications, automates interview scheduling, and responds to FAQs; uses natural language processing and machine learning to personalize the candidate experience and make recruiting automation seamless.¹⁴
Curious Thing	<ul style="list-style-type: none">▶ Leads the conversation by asking open and closed-ended questions about the candidate's skills, experiences, job expectations, and ambitions; able to generate context-relevant questions based on each candidate's unique responses; AI screens candidates at scale for key behavioral traits to aid in creating shortlists.^{15, 16}

13 "End to End AI Recruiting Software," AllyO, allyo.com/hello/

14 "Recruiting Chatbot", Emissary.ai, emissary.ai/recruiting-chatbot/

15 "Curiosity knows no bounds," Curious.io, curiousthing.io/conversational-discovery-ai

16 "What Is Conversational AI?," Curious Thing, curiousthing.io/blog/insights/what-is-conversational-ai



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EVA	<ul style="list-style-type: none">▶ AI-powered chatbot engages in conversations with candidates to answer FAQs, provide personalized job recommendations, and initiate processes that can be automated—such as one-click applications and screening.¹⁷
Herefish	<ul style="list-style-type: none">▶ Tool for engaging talent pools with relevant opportunities; intelligent matching suggests jobs to candidates, with scoring to determine role fit.¹⁸
Impress	<ul style="list-style-type: none">▶ AI chatbot software uses natural language processing to have meaningful conversations with candidates and provide answers to FAQs and questions about the status of their application within seconds.¹⁹
Mya	<ul style="list-style-type: none">▶ Conversational AI that answers candidate FAQs in real time; candidates can find a job, ask a question about benefits, or track the status of their application.²⁰
Paradox	<ul style="list-style-type: none">▶ AI chatbot guides candidates through the entire hiring lifecycle from job search to hire; candidates can connect, receive answers, and track their application status instantly.²¹
Robo Recruiter	<ul style="list-style-type: none">▶ Virtual assistant leads two-way SMS communication to collect candidate information and availability; recruiters have the option to take over the SMS conversation and talk directly with candidates.²²

17 "Eva.ai," Eva AI, eva.ai/hr4-0-dcj-candidate-experience/

18 "Recruiting AI & Automation," Herefish, herefish.com/tour/recruiting-ai/

19 "impress.ai - AI Chatbot Software for Recruiting and HR," Impress. AI, impress.ai

20 "Meet Mya," Mya, mya.com/meetmya/

21 "Paradox: THE AI Assistant for Recruiters," Paradox.ai, paradox.ai/

22 "Solutions - RoboRecruiter," RoboRecruiter, robo recruiter.ai/solutions



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[Sense](#)

- ▶ Recruiting chatbot uses natural language processing and AI to drive candidate engagement and automate pre-screening and interview scheduling.²³

[Smart Recruiters](#)

- ▶ SmartPal chatbot is available 24x7 in multiple languages and across all messaging platforms; automates FAQs for candidates and personalizes job search experiences; connects to the recruiter’s calendar to automatically coordinate availability and interview scheduling.²⁴

[Wade and Wendy](#)

- ▶ Conversational bot “Wendy” generates personalized messages, promotes job descriptions, answers FAQs about open roles, confirms candidate interest and availability, conducts screening, produces candidate short lists, and schedules interviews.^{25,26}

[XOR](#)

- ▶ Conversational AI can screen and score candidates, automate replies and conversation, and schedule interviews.^{27,28}

23 "Sense Recruiting Chatbot | The Conversation Starts Soon," Sense, sensehq.com/chatbot

24 "The Best AI Recruiting Chatbot | SmartPal | SmartRecruiters," Smart Recruiters, smartrecruiters.com/recruiting-software/smartpal/

25 "Wade and Wendy," Wade and Wendy, wadeandwendy.ai/

26 "Wendy," Wade and Wendy, wadeandwendy.ai/wendy/

27 "Text Recruiting Software and Platform," XOR.ai, xor.ai/text-recruiting

28 "Text to Apply For Employers," XOR.ai, xor.ai/text-to-apply

Direct Sourcing



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[LiveHire](#)

- ▶ AI-powered talent matching creates candidate shortlists, matches candidates to each open role, and displays talent pools by candidate specialties and experience.²⁹

[TalentNet](#)

- ▶ AI-powered applicant rankings and candidate suggestions assists recruiters with decision-making.³⁰

[WillHire](#)

- ▶ Surfaces best-fit candidates through personalized job matches and screening tools driven by machine learning and AI.^{31, 32}

²⁹ "Best Applicant Tracking System (ATS) for Recruitment," LiveHire, livehire.com/our-solutions/applicant-tracking-system/

³⁰ "Products," TalentNet, talentnet.com/products/

³¹ "Direct Sourcing," WillHire, willhire.co/#

³² "Online Direct Sourcing Tool," WillHire, willhire.co/direct-sourcing/

Video Interviewing



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[Cangrade](#)

- ▶ AI-powered Pre-Hire Assessments analyze 50 traits to produce Success Models that accurately predict employee success; automates movement of candidates with high fit scores into the video interview process; AI generates bias-free structured interview questions based on your Success Model. ^{33,34}

[Interview Suite by Viasto](#)

- ▶ Web-based video recruiting tool that allows candidates to submit video applications and interview recordings; uses AI to generate customized interview frameworks for each open role. ^{35,36}

[Knockri](#)

- ▶ Offers video, text, and audio-based AI predictive behavioral assessments to automate shortlisting of best candidates, reduce adverse impact, and increase diversity; AI-driven algorithm quantifies candidate skills and competencies to produce applicant scores and tailored shortlists. ³⁷

33 "Video Interviews," Cangrade, cangrade.com/solutions/video-interviews/

34 "How Cangrade Works," Cangrade, cangrade.com/why-cangrade/how-it-works/

35 "Viasto: Video Recruiting Software - Interview Suite," Viasto, viasto.com/en/

36 "Recorded Video Interview - Smart, Reliable, Efficient," Viasto, viasto.com/en/product/recorded-video-interview/

37 "AI Behavioural Assessments," Knockri, knockri.com/behavioural-assessments/

SELECT



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[Talview](#)

- ▶ AI-enabled video interviewing software leverages Natural Language Processing and Machine Learning to analyze emotion, tone, psycholinguistics, keywords, and more.³⁸

[videoBIORecruiter](#)

- ▶ Digital interviewing platform leverages AI to analyze candidate language and provide a candidate score; to reduce bias, only audio interviews are analyzed by AI.³⁹

38 "Video Interview Software", Talview, talview.com/video-interview-software

39 "Video Interviewing Software," videoBIORecruiter, videobiorecruiter.com/reducing-bias-with-blind-interviewing/

Skills Assessment



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FEATURES

[Filtered.ai](#)

- ▶ AI-generated assignments based on job role, technical requirements, and cultural fit; proctoring and fraud detection tools alert hiring managers if applicants copy and paste answers, receive help from others, or submit identical solutions.⁴⁰

[Glider.ai](#)

- ▶ Offers assessments based on real life job simulations; intelligent stack ranking weighted by your custom criteria shows which candidates best match open positions; AI-driven proctoring auto-flags cheating and plagiarism by detecting deceitful submissions and multiple faces on screen.⁴¹

[iMocha](#)

- ▶ AI-enabled driven skills assessment with over 2,000 tests to choose from; AI-proctoring ensures integrity of remote assessments with real-time image, audio, and video monitoring; AI insights allow hiring managers to identify necessary skills with actionable data points that provide an accurate skills competency report.^{42,43}

40 "Filtered - Features," Filtered.ai, [filtered.ai/features](#)

41 "Automated Recruiting & Video Interview Platform," GLIDER.ai, [glider.ai/employer/](#)

42 iMocha: #1 Skills Assessment Software with 2000+ Skill Tests, iMocha, [imocha.io/](#)

43 "Our best in class cheating prevention solution," iMocha, [imocha.io/online-remote-proctoring](#)



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[SHL](#)

- ▶ Using speech recognition, natural language processing, and machine learning, SHL generates scores on job-related competencies, such as grammar, content relevance, email etiquette, and speaking skills; AI-powered remote proctoring utilizes video, browser controls, and keystroke analytics.⁴⁴

[TrueNorth by Emmersion](#)

- ▶ Language proficiency assessments evaluate overall language experience and previous exposure; scoring process utilizes speech recognition and natural language processing, advanced psychometrics, and machine learning; testing is available for: English, French, German, Italian, Japanese, Mandarin. Portuguese, Spanish.⁴⁵

[TrueUp](#)

- ▶ “Gamified” skill training increases engagement with students and professionals and enhances skills with network-validated performance feedback from game results; performance is evaluated with AI-driven and automated scoring algorithms.⁴⁶
-

44 "6 Best Practices for Harnessing the Power of AI in Talent Assessment," SHL, shl.com/en/blog/6-best-practices-for-harnessing-the-power-of-ai-in-talent-assessment/

45 "TrueNorth - First Fully-Automated Speaking Test," Emmersion, emmersion.ai/products/truenorth/

46 "SOLUTION," TrueUp, trueupnow.com/gamify



Insights and Analytics

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One Model	▶ One AI feature offers a suite of predictive pipelines and data extensions, allowing organizations to build, evaluate, and predict workforce behavior; open sourced to allow end users to customization of predictive models and code. ⁴⁷
Swoop Talent	▶ AI powered algorithms automatically connect and verify talent data from both internal and external sources, providing organizations with a single access point to retrieve accurate, connected, and up-to-date candidate data. ⁴⁸
Talentegy by Jobvite	▶ AI enhanced talent analytics platform continuously monitors candidate and employee experience, measures engagement in real-time, and provides detailed EVP and sourcing metrics. ⁴⁹
Vettd.ai	▶ Custom AI solutions built using your company data; may be used to tag resumes with skills, relevant roles, experience level, or any additional attribute you value. ^{50,51}

47 "One AI," One Model, onemodel.co/one-ai

48 "SwoopTalent uses AI powered algorithms to automatically connect and verify talent data," Swoop Talent, Facebook, facebook.com/SwoopTalent/videos/swooptalent-uses-ai-powered-algorithms-to-automatically-connect-and-verify-talen/1472251012884599/

49 "Talentegy: Candidate & Employee Experience Management," Talentegy, talentegy.com

50 "Vettd.ai - Your trusted AI partner," Vettd.ai, vettd.ai/technology

51 "Vettd - SmartRecruiters Marketplace," Smart Recruiters, marketplace.smartrecruiters.com/product/vettd/



Robotic Process Automation

According to Talent Tech Labs, Robotic Process Automation (RPA) refers to software that "automate[s] tasks by operating on the front end of corporate systems"; RPA tools can be programmed to mimic human tasks and cognitive processes such as updating information, extracting and transferring data, collecting information, and triggering specific actions or workflows.⁵² Many RPA tools can be applied to an organization's recruitment infrastructure to automate processes throughout the talent cycle.

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[Automation Anywhere](#) ▶ Combines Robotic Process Automation (RPA) and AI to empower end-to-end business process automation and accelerate digital transformation.⁵³ Has been used to extract details from candidate profiles, screen resumes, personalize offer letters, and more.^{54, 55, 56}

[Catalytic](#) ▶ AI-enabled workflow automation engine used to synchronize job postings, collect applications, rank resumes, schedule interviews, recommend personalized interview questions, and keep your talent network database up to date; able to securely handle HR data, create contracts, collect signatures, and sort documents.⁵⁷

52 "The Power of Robotic Process Automation for Your Recruitment Function," Talent Tech Labs, talenttechlabs.com/trends-report-the-power-of-robotic-process-automation-for-your-recruitment-function/

53 "Intelligent Automation | RPA+AI," Automation Anywhere automationanywhere.com/rpa/intelligent-automation

54 "Download Candidate Profile from LinkedIn | Bot Store," Automation Anywhere, botstore.automationanywhere.com/bot/download-candidate-profile-from-linkedin

55 "Intelligent Resume Selector (Word) - Bot Store", Automation Anywhere, botstore.automationanywhere.com/bot/a2019-intelligent-resume-selector-word

56 "Generate Offer Letter - Bot Store," Automation Anywhere, botstore.automationanywhere.com/bot/generate-offer-letter

57 "Automation for Staffing," Catalytic, catalytic.com/solutions/by-industry/staffing



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[Microsoft Power Platform](#)

- ▶ Low-code platform that enables end users to create virtual bots and design automated process workflows.⁵⁸ Attended RPA requires end users to initiate tasks and approve prompts, while unattended RPA can trigger workflows and automate high-volume and repetitive tasks.⁵⁹ AI Builder supports the Power Platform and assists the user in creating and customizing their PowerApps and Flows.⁶⁰

[UiPath](#)

- ▶ RPA and AI-enabled automation opportunities enable organizations to process documents, recognize on-screen elements, and initiate conversations.⁶¹ AI Center uses a drag-and-drop function, enabling users to seamlessly deploy machine learning models.⁶²

58 "Power Platform on Microsoft Learn | Microsoft Docs," Microsoft, docs.microsoft.com/en-us/learn/powerplatform/
59 "Robotic Process Automation (RPA) | Microsoft Power Automate," Microsoft, flow.microsoft.com/en-us/robotic-process-automation/
60 "Introducing AI Builder for Power Platform | Microsoft Power Apps," Microsoft, powerapps.microsoft.com/en-us/blog/introducing-ai-builder-for-powerplatform/
61 "Artificial Intelligence and RPA," UiPath, uipath.com/product/ai-rpa-capabilities
62 "RPA & AI Integration with AI Center," UiPath, uipath.com/product/rpa-ai-integration-with-ai-center

Summary of AI-Powered Talent Tech



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