AI in Hirevue Products

Artificial Intelligence (AI) powers various features across Hirevue's product suite. Below is a detailed overview of where AI is integrated into our offerings, along with insights into the specific types of AI technologies employed.

Definitions

**Given the varied global regulatory definitions in the area of AI, we're providing general descriptions below, and we advise each customer to consider the regulations applicable to them.*

Artificial Intelligence (AI):

The capability of computer systems or algorithms to imitate intelligent human behavior. Often defined as any machine-based system that "infers from the inputs the system receives how to generate outputs, including content, decisions, predictions, or recommendations, that can influence physical or virtual environments (Colorado AI Act).

Machine Learning:

A computational method that is a subfield of artificial intelligence and that enables a computer to learn to perform tasks by analyzing a large dataset without being explicitly programmed.

Language Model (LM):

A mathematical model that analyzes large amounts of text in order to accurately represent the relationships between words. These models essentially translate language into a mathematical representation that captures semantic meaning, grammatical structure, and contextual dependencies.

Generative AI (Gen AI):

Artificial intelligence that creates new content—such as text, images, code, or audio—by learning patterns from vast datasets during training, then using those learned patterns to produce original outputs in response to user prompts. Large Language Models (LLMs) are a prominent example of generative AI, specializing in text generation and understanding.

AI in Hirevue Products

AI models we employ

Speech Transcription

Our recorded interviews are transcribed using state-of-the-art 3rd party AI-based transcription models that achieve near-human accuracy on a variety of accents and dialects. For AI-scored interviews, we use rev.ai and for on-demand interviews that are not scored we use the Google transcription service.

Machine Learning	Language Model	Gen AI
ON	ON	OFF

Assessments

AI-Scored Interviews

Our AI-scored interviews are processed using LMs on transcripts of candidate responses. LMs essentially translate language into a mathematical representation that is then used to train our proprietary models and ultimately, to predict job-related competencies based on the language used in an answer to a specific interview question. These models are trained, using a machine-learning approach, to predict an expert evaluator's rating and we took great care to carefully curate the training data. All models must uphold high standards of accuracy and fairness. In practical terms, a candidate's response to a behavioral interview question is transcribed into text, then that text is fed into our AI model, and a score is produced. Candidates are then shown in tiers and stack-ranked, highlighting the most promising candidates, and ultimately supporting human decision-making.

Machine Learning	Language Model	Gen AI
ON	ON	OFF

Game-Based

Our Game-Based Assessments rely on machine-learning models to predict standard psychometric constructs. The training data is made up of candidates who both played a game and completed a more traditional, widely-used psychometric test. The various components of gameplay behavior are analyzed and the algorithm finds patterns of gameplay behavior that predict the candidate's performance on a traditional psychometric measure. Candidates are scored based on the prediction of how they would perform on the traditional test given their gameplay behavior.

Machine Learning	Language Model	Gen AI
ON	OFF	OFF

AI in Hirevue Products

AI models we employ

Coding Challenges

Our technical hiring platform features a library of 244 coding challenges and supports 27 different programming languages, designed to rigorously evaluate real-world coding skills. Built on a robust testing framework—not AI—coding challenges deliver accurate, objective assessments to help you identify the best technical talent for your team.

Machine Learning	Language Model	Gen AI
		

Language Assessments

Our Language Proficiency Assessments are powered by advanced AI technology utilizing custom-trained machine learning models. The system employs machine learning models developed by a third-party provider that use Natural Language Processing features to evaluate language constructs like grammar, vocabulary, and fluency. These models are trained on extensive datasets of human-scored written and spoken responses, enabling accurate prediction of candidate language proficiency according to the Common European Framework of Reference for Languages (CEFR) standards.

Machine Learning	Language Model	Gen AI
		

Find My Fit

A predictive assessment designed to help candidates identify job opportunities based on their job preferences and work styles. This product uses a clustering machine learning algorithm to group similar jobs together and make recommendations based on candidate and job profile similarity.

Machine Learning	Language Model	Gen AI
		

Virtual Job Tryouts (VJTs)

Virtual Job Tryouts (VJTs) are immersive, online pre-employment assessments that simulate key aspects of a target role. They combine multiple measurement types - such as situational judgment, work history, problem solving, and work style - to evaluate job-relevant competencies. VJTs do not use AI to evaluate candidate responses. Scoring is based on validated, non-AI algorithms developed by Industrial-Organizational Psychologists using job analysis data, empirical research, and expert weighting. VJTs provide a realistic job preview for candidates while delivering objective, predictive insights to support fair and data-driven hiring decisions.

Machine Learning	Language Model	Gen AI
		

AI in Hirevue Products

AI models we employ

Interview Insights

Our Interview Insights product uses speech transcription and Generative AI to analyze both Live and OnDemand interviews. Our Generative AI system is Anthropic (Claude Sonnet), which is executed in Amazon Web Services (AWS) Bedrock. For OnDemand interviews, Interview Insights transcribes and summarizes responses. Further, if questions from the Hirevue competency library are used we identify specific pre-defined key behaviors from our Behaviorally Anchored Rating Scales (BARS) that candidates demonstrate during their responses. For AI-scored interviews and use these observed behaviors to generate detailed explanations of competency ratings. For Live interviews, this product can provide detailed speaker analytics, including question identification, speaker turns, and answer summaries. By grounding responses in the data collected during the interview, the system promotes clarity, consistency, and transparency in evaluation. We apply guardrails by prompting the system to generate output that is relevant, fair, and structured.

Machine Learning	Language Model	Gen AI
✓	✓	✓

Assessment Builder

Assessment Builder draws upon different data sources including O*NET, Hirevue's extensive job analysis research, customer job descriptions, and SME surveys to create an accurately tailored skill profile for a job role. Assessment Builder then recommends assessment content based on the requirements identified for the role and user preferences, streamlining the creation of predictive, fair, and job-relevant assessments. The system uses static, supervised machine learning models - trained and tested on over 10k job descriptions augmented with IO-reviewed LLM ratings - to quantify the importance of competencies from customer-provided job descriptions, expert IO psychologist ratings that map the relevance of Hirevue's assessment content to a broad range of roles, and a recommendation engine, built using IO expert judgment and results from Hirevue's collective research studies on its assessments' predictive power and fairness, to generate the role-specific assessment. Our AI models use only customer-provided reference information (e.g., job descriptions), ensuring recommendations are explainable, fair, and tailored to each role. Users can choose whether to create assessments with or without AI-based scoring models.

Machine Learning	Language Model	Gen AI
✓	✓	✓

AI in Hirevue Products

AI models we employ

Talent Engagement

Hirevue Hiring Assistant (HV4 platform)

Our chatbot leverages a LM, specifically RoBERTa-based transformer models to aid in candidate interactions. Similar to our AI-scored interviews, these models create a mathematical representation of the text. The machine learning models deployed include intent classification (understanding the user's intent behind their message), text ranking (showing candidates the most relevant jobs), question answering over company documentation, entity recognition, and a 3rd party model for spelling correction.

Machine Learning	Language Model	Gen AI
		

Match and Apply (T2O platform)

Our Talent Engagement chatbot leverages cutting-edge Generative AI technology to provide personalized and flexible interactions with candidates, streamlining the hiring process. Powered by Anthropic language models through Amazon Web Services (AWS) Bedrock, our solution ensures a secure AI experience, keeping data protected and free from external exposure. The chatbot utilizes customer-provided data as its knowledge base to reason effectively, answer questions, and deliver search results. To ensure reliability, we implement guardrails during preprocessing and postprocessing, keeping the chatbot focused on provided data, maintaining relevance, and mitigating the risk of issues like prompt injections, toxic language, bias, or other inappropriate responses.

Machine Learning	Language Model	Gen AI
		

On-Demand Text via SMS/WhatsApp (T2O platform)

When candidates are invited to an On-Demand Text interview conducted via SMS/WhatsApp, they interact with an intent-identifying chatbot; the chatbot guides the candidate to begin the interview. The NLP algorithm is powered by an IBM Watson intent classifier, trained to understand user intents based on real user traffic and route the user through the conversation appropriately. **Note: NLP is not used for SMS/WhatsApp invitations when the interview experience occurs via browser. In this use case, candidates simply receive a link to a webpage, so no chatbot interaction occurs.**

Machine Learning	Language Model	Gen AI