

# AI OUTLOOK

GA  
GENERAL ASSEMBLY

## HOW AI IS TRANSFORMING BUSINESS

Few technologies hold as much power to reshape our world as artificial intelligence. But, along with excitement, the arrival of AI has sparked fierce debates on its role in our society and rising concerns about job displacement. Will it give us superpowers, or will it render us irrelevant?

At GA, we're excited about the future of AI. We believe that people will continue to be key for long-term business success—and those organizations that invest in maximizing human-AI connections will come out ahead.

I look at the promise of automation as a celebration. Because it means that machines will help humans to **automate the tedious tasks in our work and life.**

— CHARIS LOVELAND, DATA INSTRUCTOR\*



## THE FUTURE IS NOW

### TOP INDUSTRIES BENEFITING FROM AI TRANSFORMATION

Whether it's automating tasks or assisting with creation and decision-making, AI is already transforming work across sectors.

#### TECH

AI is revolutionizing tech by automating repetitive codework, accelerating innovation, and freeing up workers to focus on creative endeavors.

#### EDUCATION

AI can make education more inclusive and accessible, acting as a personalized instructor for students and an assistant for educators.

#### HEALTHCARE

AI is transforming medicine with smarter testing and diagnostics, enhanced prevention, and accelerated new drug development.

#### FINANCE & INSURANCE

Financial institutions are using AI to improve customer experience, bolster theft and fraud protection, and enhance decision-making.

#### MARKETING

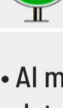
AI's ability to analyze large data sets is helping marketers get to know their audiences better and create highly engaging content.

## MAKING SENSE OF THE AI BOOM

### THE TOP AI TOOLS IN 2023

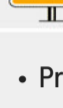
Automation, data-driven decision making, and generative AI are transforming business models and augmenting human capabilities.

#### MACHINE LEARNING (ML)



#### WHAT IS IT?

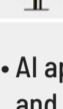
- AI models that analyze large datasets to identify patterns and make predictions
- Examples include image recognition, recommendation systems, and predictive analytics



#### HOW ARE BUSINESSES USING IT?

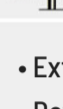
- Predictive analytics
- Analyzing large datasets
- Enhancing decision-making

#### NATURAL LANGUAGE PROCESSING (NLP)



#### WHAT IS IT?

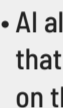
- AI applications that can understand and process human language
- Large language models (LLMs), virtual assistants, and language translators all use NLP



#### HOW ARE BUSINESSES USING IT?

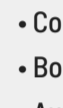
- Extract insights from textual data
- Develop automated interactions
- Personalize products and services

#### GENERATIVE AI



#### WHAT IS IT?

- AI algorithms and models that generate new data based on their training data
- Generative AI enables text recognition (ChatGPT, Bard) and image generation (DALL-E) technologies



#### HOW ARE BUSINESSES USING IT?

- Content creation
- Boosting creativity and divergent thinking
- Automating tasks and processes

MORE THAN HALF OF THE TIME EMPLOYEES WORK IS SPENT ON LANGUAGE-RELATED TASKS — AI TOOLS COULD CUT THAT TIME BY 65%.

—ACCENTURE

## BEYOND CHATBOTS

### THE MOST IN-DEMAND AI SKILLS RIGHT NOW

Demand for roles involved directly in building, optimizing, and maintaining AI models is growing:

- PYTHON** The main coding language for ML, AI, and data science
- COMPUTER SCIENCE** Development of the algorithms that power AI applications
- SQL** Enables storage and manipulation of the large-scale datasets used in AI
- DATA ANALYSIS** Collection, cleansing, and transformation of data for training AI models
- DATA SCIENCE** Development, implementation, and maintenance of AI systems<sup>2</sup>

Like any technology, there can always be a fear of being replaced, but like any other technology that comes into play, it helps automate things but it's not going to fully replace. **There is still so much space for the humans working on these tools** to remain there and own the digital transformation.

— LUPE COLANGELO, MANAGER, OUTCOMES PARTNERSHIPS

## WILL AI CREATE JOBS OR DESTROY JOBS?

As AI becomes more widespread, it brings both risks and opportunities. At GA, we believe that artificial intelligence will gradually transform existing roles and create new ones, rather than leading to the bleak "jobs apocalypse" many fear. Here's why:

#### FULL-SCALE AI ADOPTION WILL TAKE TIME

Integrating AI will require large-scale organizational transformation and overcoming risk aversion.<sup>3</sup>

#### REGULATIONS COULD SLOW AI ADOPTION AND DEVELOPMENT

Restrictions could make AI adoption and integration costlier for enterprises and slow the technology's development.<sup>4</sup>

#### DEMAND FOR AI-SKILLED TALENT FAR OUTSTRIPS SUPPLY

AI-ready talent is still scarce—and will stay that way for some time.

## WHAT DO GA STUDENTS AND ALUMNI THINK ABOUT AI?

MOST GA STUDENTS AND ALUMNI ARE EXCITED ABOUT AI

62.6%

OF RESPONDENTS SEE AI AS AN EXCITING NEW OPPORTUNITY

BUT SOME ARE WORRIED ABOUT THE LONG-TERM EFFECTS ON THEIR CAREERS

37.4%

ARE AT LEAST A LITTLE CONCERNED AI WILL REPLACE THEM

ALREADY, MORE THAN HALF HAVE USED AI IN SOME CAPACITY AT WORK

64.2% HAVE USED AI

35.8% HAVE NEVER USED AI

30% OF THOSE THAT HAVEN'T USED IT ARE LOOKING FORWARD TO DOING SO

AND THEY KNOW IT'S CRUCIAL TO KEEP UP WITH NEW DEVELOPMENTS

48% RECOMMEND THEIR PEERS LEARN MORE ABOUT HOW TO USE AI TOOLS ETHICALLY

34.1% SAY IT'S IMPORTANT TO STAY INFORMED ON AI NEWS AND TRENDS

## MAKING FRIENDS WITH MACHINES

### PREPARING FOR AN AI-POWERED FUTURE

As workforce transformation accelerates, the right talent mix will be crucial for accelerating AI adoption and ensuring successful AI implementation.

#### 1 UNDERSTAND HOW AI WILL RESHAPE YOUR ORGANIZATION

Successful AI adoption will require paying as much attention to people as to technology. Having a clear picture of the state of your organization's tech talent and identifying urgent skills gaps will enable you to integrate new roles while enhancing collaboration and cross-functionality.

#### 2 UPSKILL AND RESKILL YOUR EXISTING TALENT

Given that AI technology is relatively new and changing fast, finding in-house talent is challenging. A more effective strategy: invest in reskilling and upskilling your in-house talent. This applies both to tech professionals and everyone else in your organization that can benefit from AI and data literacy.

#### 3 PARTNER WITH TALENT DEVELOPMENT EXPERTS

The rapid pace of AI means that both people and businesses will need to embrace non-traditional learning methods like bootcamps. These learning experiences are designed to stay up-to-date with the latest developments and provide students with practical skill sets that match employers' needs.

### HOW WE'RE WORKING TO CLOSE THE AI LEARNING GAP (Hint, it's already in our classrooms)



GA students are learning how AI works—and how to use it responsibly.

Standard AI curricula is now available in all of our bootcamps and some of our short form courses.



Our instructors are fully up-to-date on the latest AI tools and developments.

Learning institutions must consider how we can use AI to help people be **more productive, happy, and successful** in their jobs.<sup>5</sup>

— ROBERT JONES, VICE PRESIDENT, PRODUCT STRATEGY & INNOVATION

#### ABOUT GA

General Assembly is a pioneer in education and career transformation, specializing in today's most in-demand skills. The leading source for training, staffing, and career transitions, we foster a flourishing community of professionals pursuing careers they love.

PREPARE AND FIND TECH TALENT FOR THE FUTURE OF YOUR ORGANIZATION.

GET IN TOUCH →