# AI SKILLS GAP







JOBS REQUIRING AI SKILLS IN THE US SINCE **2013**.



\$57.6B GLOBAL SPENDING ON Al AND ML PROJECTED BY 2021.



14X GROWTH IN ACTIVE US STARTUPS DEVELOPING Al systems since **2000**.



\$6B INVESTMENTS INTO OVER 1,000 AI STARTUPS SINCE 2015.

# **SIGNIFICANT AI SKILL SHORTAGE**



**300K CURRENT GLOBAL** Al researchers & PRACTITIONERS.



**100K CURRENT STUDENTS** STUDYING IN Al RELATED FIELDS.



**CURRENT ESTIMATED** NEED FOR AI TALENT POOL

## **TOP AI SKILLS & JOB REQUIREMENTS**

- · Designing, training, and improving algorithms
- Productizing research & development
- Strong research skills Diverse programming skills
- Ability to apply machine learning
- to optimize critical business metrics Advanced statistical analysis using common tools
- Data mining and data curation
- Experience building and deploying learning models
- Designing statistical tests and perform experiments to measure algorithm performance
- Research and develop advanced prototype hardware and software
- Take new ideas, methods, or models and implement them efficiently using code









ROBOTIC SCIENTIST



DATA SCIENTIST

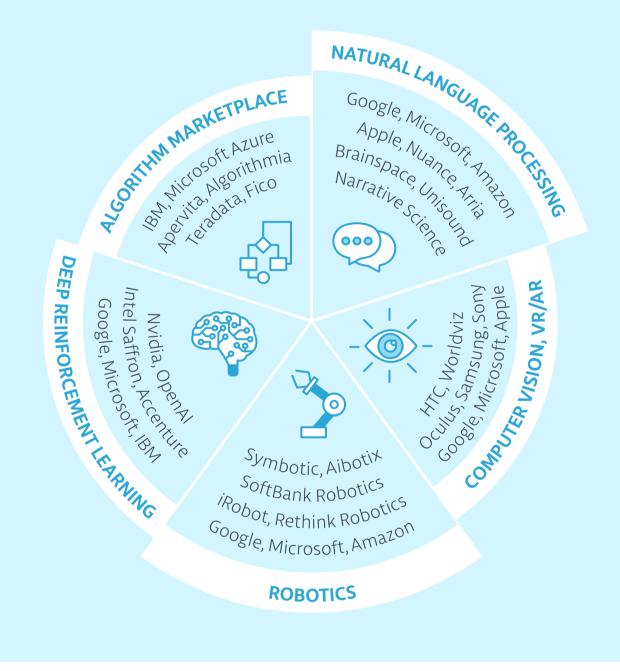


RESEARCH SCIENTIST



Business INTELLIGENCE DEVELOPER

## AI EMPLOYERS BY AI FIELD



## **TOP SKILLS BY AI FIELD**



#### **MACHINE LEARNING**

Creating machine learning platforms, Optimizing AI hardware, Data science, Data mining, TensorFlow, Theano, PyTorch, SQL



#### **NATURAL LANGUAGE PROCESSING**

Natural language generation, Speech recognition, Text parsing and language modeling, Text analytics, OpenNLP, sPaCy, NLTK gensim



#### **COMPUTER VISION**

Image processing chains, Signal processing, Digital image processing, Developing computer vision models, Imaging modalities like LiDAR, RGBN, Image detection modeling

## **TOP AI EMPLOYERS BY HUB**

