Work Smarter, Not Harder: How to Build a Career in AI

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Popular culture has led us to believe that *this* is AI...
But, believe it or not, AI is already part of our everyday life...

*Apple* uses AI for FaceID to determine if the person unlocking the phone is you.

*Uber* uses AI for estimated ride times and meal delivery times.

*Netflix* uses AI to serve more relevant movies and TV shows.

*The Weather Company* uses AI to make more detailed and accurate weather forecasting.
15.7 trillion increase in global GDP due to AI by 2030

Source: PwC, "AI to drive GDP gains of $15.7 trillion with productivity, personalization improvements," 2017
What is AI, really?

Predictions + Automation + Optimization
Businesses across all industries already use AI today

**Predict** and shape future outcomes

**Automate** decisions, processes, experiences

**Optimize** people to do higher value work
But, if you have “bad” AI, you might find yourself in the news...

Credit

Anti-money laundering controls failing to detect terrorists, cartels, and sanctioned states

Employment

Hiring Algorithms Raise Questions of Validity and Bias

Eroded fairness is among the risks of artificial intelligence in hiring.

Education

AI is coming to schools, and if we’re not careful, so will its biases

Criminal Justice

AI tools in US criminal justice branded unreliable by researchers

Report uncovers serious problems of accuracy and bias in predictive policing technology
That’s why AI ethics are so important

Trust in AI starts with ethical behavior

Data and insights belong to their creator

AI systems must be transparent and explainable

The purpose of AI is to augment human intelligence
“AI won’t replace managers, but managers who use AI will replace those who don’t.”

Harvard Business Review

40% of organizations are adding more jobs as a result of AI

133M new jobs created by AI by 2022

Sources:
Dun & Bradstreet, “Artificial Intelligence is Creating Jobs,” 2019
World Economic Forum’s (WEF) 2018 Future of Jobs report
Example team that turns raw data into AI fuel

**STAKEHOLDERS**
- CIO & CDO: Establish goals
- Executive: Deliver on goals

**LEADS**
- Offering Manager: Leads business team
- Data Scientist: Leads data team
- Design Manager: Leads design team
- Dev Manager: Leads dev team

**TEAM**
- Data Engineer
- Data Analyst
- Data Architect
- Data Trainer
- Researcher
- Designer
- Developer
- QA
The idea of a career in AI...
The reality of a career in AI...

AI Researcher Salaries
387 Salaries  Updated Jan 19, 2020

Average Base Pay

$114,121 /yr

Not enough reports to show salary distribution

$78K Low

$150K High
Some AI careers to consider

**Data Engineer**
Develops, constructs and tests IT systems and architectures, data optimization and administration
Skills: Programming, Mathematics, Big Data
28% job growth rate
$80-160K

**Data Scientist**
Cleans data, performs predictive modelling statistics and analysis to solve business needs
Skills: Statistics, Mathematics, Communications
19% job growth rate
$55-120K

**Business Analyst**
Understand needs of the business and use data to create insights and solutions
Skills: Business Acumen, Domain Knowledge, Statistics
14% job growth rate
$45-140K
What do you need to understand to be hired for these types of AI roles?

The Direction

The Process

The Data
The Direction: Someone who understands how to frame the business problem and define what success looks like

**Identify the problem**

Need to know the business problem you’re trying to solve

**AI Suitability**

Understand if and how to use AI to address the problem

**Measurability**

Establish clear metrics to judge if the project was a success
The Process: Someone who understands the business processes critical to establishing real-world scenarios and valuable outcomes

**Humanized experiences**
Customer-facing workflows must be humanized, as well as automated, end to end

**Self-aware operations**
Adaptive operational processes and workflows will continuously learn and be self-aware

**Peerless ecosystems**
Platform workflows will be open, and enable and span ecosystems and networks
**The Data:** Someone who understands data: Where does it come from? What is the quality? How should it be handled to preserve security and trust?

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<th>Incumbent advantage</th>
<th>Trust in data</th>
<th>Data rights</th>
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<tr>
<td>Proprietary and heterogeneous data and analytics can be integrated and curated to drive business platform performance</td>
<td>Trust in data and avoidance of bias is required at the heart of valid cognitive workflows and decision making</td>
<td>Data rights concerns and permissioned information access will become more important</td>
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How do you kick-start your AI career?
Get started by checking out these resources.

IBM + Coursera Professional Certificates
Flexible online training to grow and demonstrate your AI skills.

- IBM Data Science Professional Certificate
- IBM AI Engineering Professional Certificate
- IBM Applied AI Professional Certificate

ibm.biz/AI Learning

coursera.org/IBM
Thank you

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