

7KH )XWXUH RI ODFKLQH /HDL  
/HDUQLQJ ,R7 'DWD 6FLHQFH



7KH 8OWLPDWH ORGHUQ \*XLGH WR \$  
,QFOXGLQJ ODFKLQH /HDUQLQJ 'BHS  
6FLHQFH 5RERWLFV 7KH )XWXUH RI  
8SVNLOOLQJ DQG ,QWHUQDWXUHQ



RXW RI

/DQJXDJH

(QJOLVK

)LOH VLJH

.%

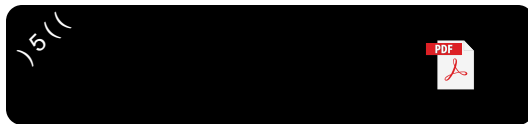
6FUHHQ 5HDGHU 6XSSRUWHG

3ULQW OHQJWK

SDJHV

/HQGLQJ

(QDEOHG



ODFKLQH OHDUQLQJ GHHS OHDUQLQJ RE,FWL  
RI WKH PRVW LPSRUWDQW WHFKQRORJQRORF  
UDSLGO\FKDQJLQJ WKH ZRUOG DDEMDRUHLHP[S  
OLYHV LQ WKH \HDUV WR FRPH

,Q WKLV DUWLFOH ZH ZLOO HWDORRORORRKH  
GLVFXVV WKH ODWHVV WUHQGZLDOGSCHGH  
WHFKQRORJLHV ZLOO VKDSH RRU ZRUOG LQ

ODFKLQH /HDUQLQJ

ODFKLQH OHDUQLQJ LV D WFSH \$, DWKDWLDFDI  
FRPSXWHUV WR OHDUQ ZLWKRPXHG EIDQLQIS  
DOJRULWKPV FDQ OHDUQ IURDQGDWDDNHLGHQ

ODFKLQH OHDUQLQJ LV DOUHDG LHEMLQJ XSS  
LQFOXGLQJ

,PDJH UHFRJQLWLRQ 1DWXUBOHGDLQJLDYH  
)UDXG GHWHFWLRQ OHGLFDO GLDJQRVLV

,Q WKH IXWXUH PDFKLQH OHDFKHQHQVPRHUS  
DQG YHUVDWLOH ODFKLQH OBBOLWR DGDRI  
DQG PRUH FRPSOH[ GDWD VHWRV VQQGHWKRUH  
SUREOHPV

ODFKLQH OHDUQLQJ LV H[SHFWHG WRZKDMHU  
LQGXVWULHV LQFOXGLQJ

+HDOWKFDUH ODQXIDFWXUUDQVSRQDQDFWL

ODFKLQH OHDUQLQJ LV DOVR RPSHLEHGKWRG  
RIDXWRQRPRXV YHKLFOHV UGRWVWBQR R

## Deep Learning

'HHS OHDUQLQJ LV DW\SH RI PDFKLQH LOFLDI  
QHWZRUNV WR OHDUQ IURP GDWD UHHSOH  
FRPSOH[ UHODWLRQVKLSV EHWZHQGDWDH  
D ZLGH UDQJH RI SUREOHPV LQFOXGLQJ

,PDJH UHFRJQLWLRQ 1DWXUBOHGDLQJLDYH  
ODFKLQH WUDQVODWLRQ

'HHS OHDUQLQJ LV DUHODWLYHKOVDQZUWBG  
SURPLVH 'HHS OHDUQLQJ DOJRWKFWKIDDY

D ZLGH UDAQJH RI WDVNV DQG WLVKXHDWR HPS  
\HDUV WR FRPH

'HHS OHDUQLQJ LV H[SHFWHG WR ZIDGYH UDR  
LQGXVWULHV LQFOXGLQJ

+HDOWKFDUH 0DQXIDFWXUUQQVSRQDQFWHL

'HHS OHDUQLQJ LV DOVR H[SHFWHG WKRGSD  
DXWRQRPRXV YHKLFOHV UREWWHDPQG RWK

**IoT**

,R7 ,QWHUQHW RI 7KLQJV UKMLFVONBHWKHF I  
FRQQHFWHG WR WKH LQWHUQHWWG DWHDVHFRGH  
ZLWK HDFK RWKHU DQG EH FRQWUROOHG U

,R7 LV DOUHDG\ EHLQJ XVHG LQDWLZLVH YDUB

6PDUW KRPHV 6PDUW FLWLQV +HQQXWVFI  
7UDQVSRUWDWLRQ

,Q WKH IXWXUH ,R7 LV H[SHFWHG HWB LHHFRF  
PRUH GHYLFHV ZLOO EH FRQQHFWHG WR YLW  
DEOH WR FROOHFW DQG VKDUH PRUH GDWD

,R7 LV H[SHFWHG WR KDYH D PQJHRBILFSDXW  
LQFOXGLQJ

+HDOWKFDUH 0DQXIDFWXUUQQVSRQDQFWHL

,R7 LV DOVR H[SHFWHG WR SODORSPDQWURU  
YHKLFOHV URERWV DQG RWKHU LQWHOOLJ

## Data Science

'DWD VFLHQFH LV WKH ILHOGDRMLWXXGV WKRF  
VFLHQFH DQG GRPDLQ NQRZOHUHGWRDH[WDL  
VFLHQWLVWV XVH D YDULHW\DRKWKHFKQHLTXH  
OHDUQLQJ WR DQDO\]H GDWD DQG PDNH SU

'DWD VFLHQFH LV DOUHDG\ EHLRQJDXSHGLFLQW  
LQFOXGLQJ

)UDXG GHWHFWLRQ 3UHGLFWLYPHDQDOWM  
PDQDJHPHQW 3URGXFW GHYHORSPHQW

,Q WKH IXWXUH GDWD VFLHQFHHQVPR[SHHWS  
'DWD VFLHQWLVWV ZLOO EH BRONWRGXWHIP  
DQDO\]H ODUJHU DQG PRUH FROPHQDHWK  
PRUH DFFXUDWH SUHGLFWLRQVGRWRHPRK

'DWD VFLHQFH LV H[SHFWHG WR XIDYHDDRQJ  
LQGXVWULHV LQFOXGLQJ

+HDOWKFDUH 0DQXIDFWXUUDQVSRQDQFWL

'DWD VFLHQFH LV DOVR H[SHFWHG KMRGSDIC  
DXWRQRPRXV YHKLFOHV URERWHDQGRWK

## Robotics

5RERWLFV LV WKH ILHOG RIGWXLGQWKDQWGH  
RSHUDWLRQ DQG DSSOLFDWLRQRQIRHURVERDWW  
SURJUDPPHG WR SHUIRUP D YDULHW\ RI WD

0DQXIDFWXULQJ \$VVHPEO\ QVSHQGWQRQ 3C

5RERWV DUH DOUHDG\ EHLQJ DSSOLFDWLRQRQ

,QG X VWULDO DXWRPDWLRQ RQH DDMHQFVHUH  
H[SORUDWLRQ

,Q WKH IXWXUH URERWV DUH H[SHHFWRISGLWR  
YHUVDWLOH 5RERWV ZLOO EHODIHWWRVSHDI  
EH DEOH WR ZRUN PRUH FORVHO\ ZLWK KXP

5RERWV DUH H[SHFWHG WR KDYH UDDQDMRU L  
LQFOXGLQJ

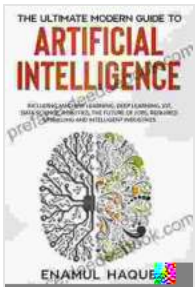
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DXWRQRPRXV YHKLFOHV URERWWHPQG RWK

0DFKLQH OHDUQLQJ GHHS OHDUQLQJRE,FWLR  
RI WKH PRVW LPSRUWDQW WHFKQRORJQRORF  
UDSLGO\ FKDQJLQJ WKH ZRUOG DDMRUHLHP[S  
OLYHV LQ WKH \HDUV WR FRPH

,Q WKLV DUWLFOH ZH KDYH H[SHFWHGWRJL  
GLVFXVVHG WKH ODWHVW WUHGHGDDQGS GHG

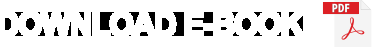
WKHVH WHFKQRORJLHV ZLOO VKDISHFRFXHU ZR  
 7KH IXWXUH RI PDFKLQH OHDUQLQJ GHHSQD  
 URERWLFV LV EULJKW 7KHVH WHFKQRORJHV  
 DQG WR KDYH D PDMRU LPSDFW RQH ZLGHV  
 WHFKQRORJLHV DUH DOVR H[SHQVHG WR  
 DXWRQRPRXV YHKLFOHV UREWWHDPQG RWK  
 :H DUH RQ WKH FXVS RI D QHZRUDVRLRQH  
 OHDUQLQJ GHHS OHDUQLQJ RYLFVDDMDHWF  
 WHFKQRORJLHV WKDW ZLOO GWHLYKQV IRVLLQ  
 SRWHQWLDORFKDQJH WKHHZKROXGGRD  
 DERXW ZKDW WKH IXWXUH KROGV



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★★★★☆ RXW RI  
 /DQJXDJH (QJOLVK  
 )LOH VLJH .%  
 6FUHHQ 5HDGHU 6XSSRUWHG  
 3ULQW OHQJWK SDJHV  
 /HQGLQJ (QDEOHG





## Unlocking the Power of Celebrity Branding: A Comprehensive Guide by Nick Nanton

,Q WKH HYHU HYROYLQJ PDUNHWLQJ ODQG'  
HPHUUJHG DV D SRWHQW IRUFH FDSWLYDWI  
VXFFHV V )URP



## The Legendary Riggins Brothers: Play-by-Play of a Football Dynasty

7KH 8QIRUJHWWDEOH 7ULR 7KH ,PSDFW RI  
7KH 5LJJLQV EURWKHUV /RUHQJR =R DQG  
LFRQV LQ WKH DQQDOV