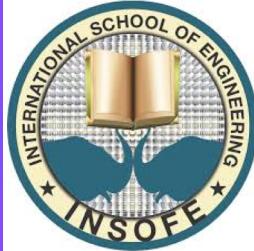


Mohamed Noordeen Alaudeen

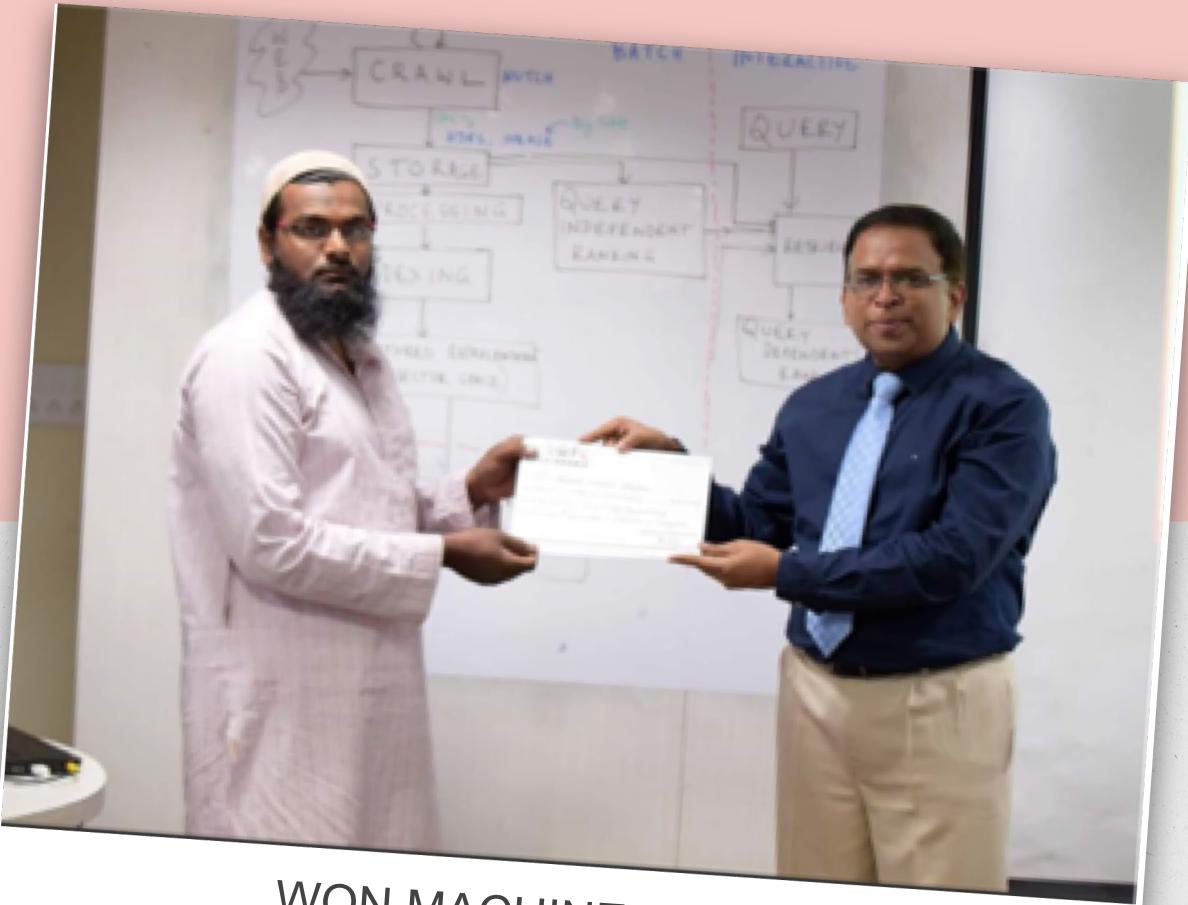
Senior Data Scientist - Logitech

ABOUT ME



logitech®





WON MACHINE LEARNING
CONTEST



WON BEST PROJECT
AWARD

International School of Engineering

awards

Certificate in Engineering Excellence in Big Data Analytics and Optimization

to

Mohamed Noordeen Alaudeen

on successful completion of all the requirements of the 352-hour program
conducted between December 10, 2016 and June 04, 2017 followed by a project defense.

This program is certified for quality of content, assessment and pedagogy by the Language Technologies Institute (LTI)
of Carnegie Mellon University (CMU). LTI also provided assistance in curriculum development for this program.



Dated this second day of August, two thousand and seventeen.

Dakshinamurthy V.K.
Dr. Dakshinamurthy V Kolluru

President



Sridhar Pappu
Dr. Sridhar Pappu
Executive VP - Academics

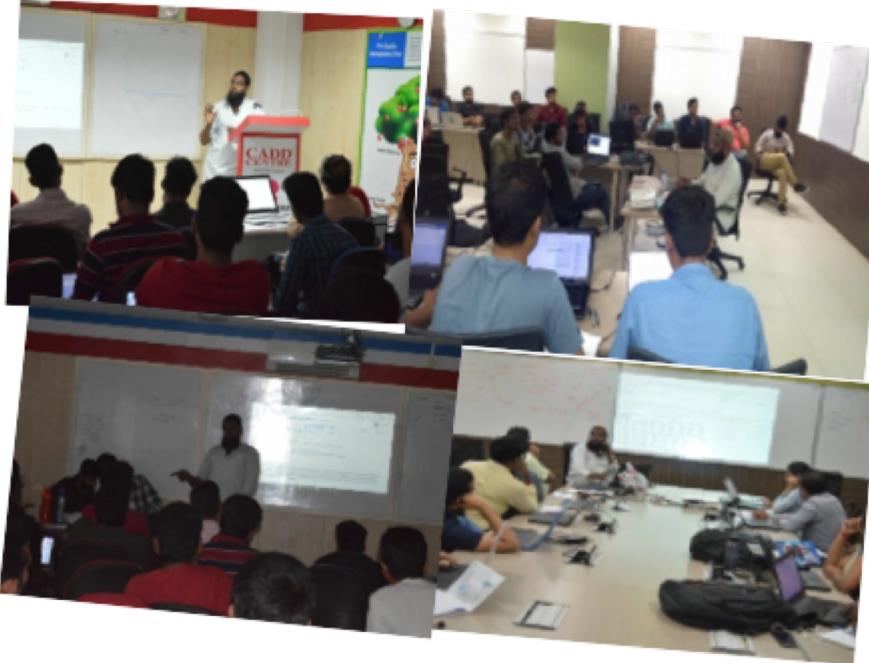


BEST STUDENT OF THE
BATCH

Program details are on the back



GUEST LECTURES



NOT THE FIRST TIME

MY WORK

<https://github.com/nursnaaz>

<https://www.linkedin.com/in/nursnaaz/>

<http://www.technaaz.com/>



Blogger

JOURNEY OF MACHINE LEARNING AND HOW TO TAME IT?

Who Is This?



Arthur Samuel



Father of Machine learning

1956 – Trains computer to play checkers

1962 – Computer defeated the state champion

**What Machine learning did
in past and doing today and
in future**

PROBLEM SET

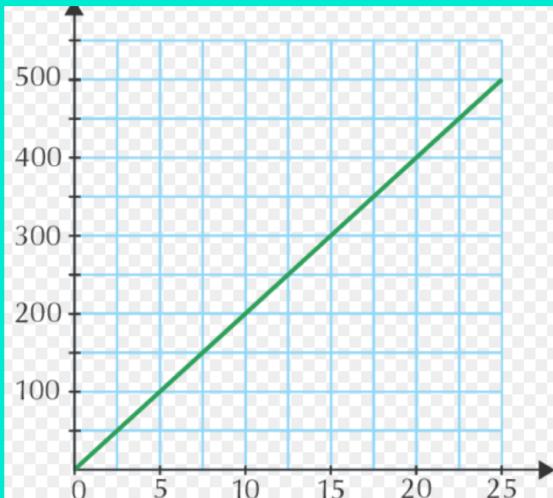
- A Specific metallic component is wearing out with use in an acidic environment
- How do we understand and use this component?

Approach 1: Science



- A chemist studies what happens to the material in acid and understands that the metal is reacting with the hydrogen in the acid to form a vapor
- Comes up with a equation and science behind

Approach 2: Engineering



- An engineer tests the degradation in a few concentrations and temperature, plots the degradation, validate the theory and comes up with the thumbs up rule

Deductive learning

- A few hypothesis that cannot be proved
- Rest of science is developed by extending these using mathematics and experiments

Inductive Learning

- Measure the degradations in hundreds of conditions (temperatures and concentrations for various times)

Result is same but

- Do not know the reasons(causations are not known and only correlations are identified)
- Walmart example(does not tell how to act)
- Marketing customer(does not tell the reason)

Where it does not work

- Fails when **randomness** prevails
- Need a **lot of data** to come to the correct conclusions



**“In God we trust.
All others must bring data.”**

- Dr. W. Edwards Deming

Machine learning wonders at past

Google

Microphone icon

Google Search

I'm Feeling Lucky

Shop All Departments

Search All Departments

Your Amazon.com > Your Amazon Facebook Page

Facebook Profile Info



Birthday and Gift Suggestions for Your Friends on Facebook

November 1
(in 3 weeks)

November 23



December 8



December 27



See gift suggestions

Amelie



Add

 Not Interested

Y Tu Mama Tambien



Add

 Not InterestedEiken has been added to
your Queue at position 2.

This movie is available now.

[Move To Top Of My Queue](#)[Continue Browsing](#)[Visit your Queue >](#)

You don't have any information about favorite books, music, or movies on Facebook. Edit your Facebook profile and add your favorites to get personalized recommendations on this page.

Popular Among Your Friends on Facebook



[The Godfather DVD Collection... DVD ~ Marlon Brando](#)



[Back in Black ~ AC/DC](#)



[Goldfinger DVD ~ Sean Connery](#)



[The Beatles Stereo Box Set ~ The Beatles](#)



[As a Man Thinketh by James Allen](#)

Guys and Balls



Add

 Not Interested

Mostly Martha



Add

 Not Interested

Only Human



Add

 Not Interested

Russian Dolls



Add

 Not Interested

★★★★★ (630) \$41.49

2 friends like this:

> See more

★★★★★ (677) \$9.99

2 friends like this:

> See more

★★★★★ (239) \$12.49

1 friend likes this:

> See more

★★★★★ (383) \$188.00

2 friends like this:

> See more

★★★★★ (261) \$3.50

1 friend likes this:

> See more

Close

in PREMIUM Search for people, jobs, companies, an Advanced

Home Profile My Network Jobs Interests Business Services Go to Lynda.com

Women Sr. Professionals - Join The North American Association of Business Women. Apply Now.

Pending invitations (417)

Hospitality Experts!Menu Corporate Communications/I... Helping people to

Ignore Accept Ignore Accept Ignore Accept

▼ See more ▼

People You May Know

M Reynolds Licensed Clinical Psychologist at Columbia... Connect

E Shamus Invite to join LinkedIn a4booth@acs.rye... Connect

S. Booth Invite to join LinkedIn a4booth@acs.rye... Add to network

N. Jacobson Senior Manager, Public Relations at Gartner Connect

Pluck PR Connect

E. Shamus Invite to join LinkedIn elishamusic@hot... Add to network

B. Johnson Partner / Chief Creative Officer Connect

Academic Connect

W. Walters Communications Invite to join LinkedIn 47 Connect

Y. Rodriguez Invite to join LinkedIn Connect

Ads

Gartner Free Gartner® Research Key Digital Marketing Trends For 2016-17. Download Our Free White Paper

Replace GSA With Fusion Unmatched Scalability, Reliability and Search Expertise. Free Download!

People You May Know

Denise Ruehrschnick Jacobson

Add as Friend



John Mullis

Add as Friend



Travis Johnson

Add as Friend



Invite Your Friends

Invite friends to join Facebook.

PIENSE

ΣΜΑΩΜΙΣ

THINK

तोचिए

ΣΚΕΨΟΥ

DENKE

PENSER



\$24,000

Who is Stoker?
(FOR ONE WELCOME OUR
NEW COMPUTER OVERLORDS)

\$ 1,000

\$77,147

Who is Bram
Stoker?

\$ 17,973

\$21,600

WHO IS
BRAM STOKER?

\$ 5600





Computers can Learn

Automatic Drug Discover

Geoffrey Hinton

From Wikipedia, the free encyclopedia

Geoffrey Everest Hinton FRS^[12] (born 6 December 1947) is a British-born Canadian^[13] cognitive psychologist and computer scientist, most noted for his work on artificial neural networks. As of 2015 he divides his time working for Google and University of Toronto.^[14] He was one of the first researchers who demonstrated the use of generalized backpropagation algorithm for training multi-layer neural nets and is an important figure in the deep learning community.^{[15][16][17]}

Contents [hide]

- 1 Education
- 2 Career
- 3 Research
- 4 Honours and awards
- 5 Personal life
- 6 References

Education [edit]

Hinton was educated at King's College, Cambridge graduating in 1970, with a Bachelor of Arts in experimental psychology.^[1] He continued his study at the University of Edinburgh where he was awarded a PhD in artificial intelligence in 1977 for research supervised by Christopher Longuet-Higgins.^{[3][18]}

Career [edit]

After his PhD he worked at the University of Sussex, the University of California, San Diego, Carnegie Mellon University.^[1] He was the founding director of the Gatsby Charitable Foundation Computational Neuroscience Unit at University College London,^[1] and is currently^[19] a professor in the computer science department at the University of Toronto. He holds a Canada Research Chair in Machine Learning. He is the director of the program on "Neural Computation and Adaptive Perception" which is funded by the Canadian Institute for Advanced Research. Hinton taught a free online course on Neural Networks on the education platform Coursera in 2012.^[20] Hinton joined Google in March 2013 when his company, DNNresearch Inc, was acquired. He is planning to "divide his time between his university research and his work at Google".^[21]

Geoffrey Hinton



Born	Geoffrey Everest Hinton 6 December 1947 (age 69) ^[1] Wimbledon, London
Residence	Canada
Fields	Machine learning Neural networks Artificial intelligence Cognitive science Object recognition ^[2]
Institutions	University of Toronto Google

Google Deep Mind



Computers Can Listen And Understand

Speech Translation And Generation



Computers Can See

Image Recognition



Some Interesting things around AI

- Artificial Intelligence created its own Movie

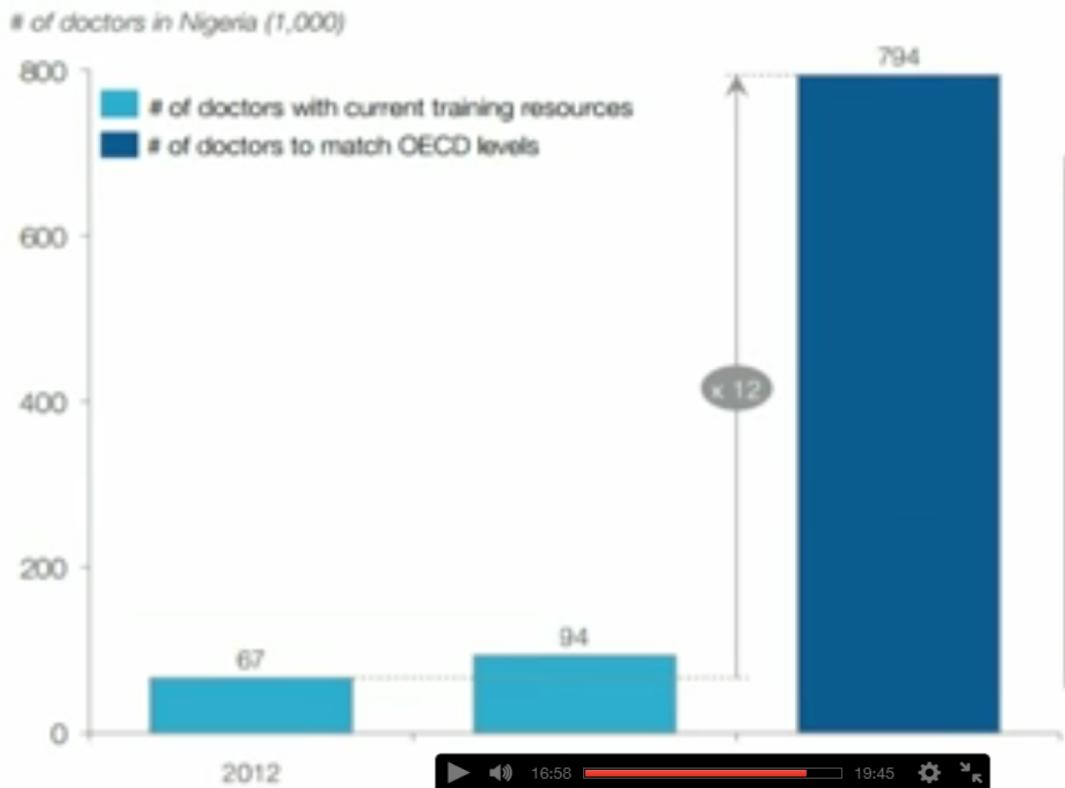
<https://arstechnica.com/gaming/2016/06/an-ai-wrote-this-movie-and-its-strangely-moving/>

- Artificial Intelligence created its own Music
- <https://www.youtube.com/watch?v=3OEmzl52stk>
- Artificial Intelligence created its own Art
- <https://www.youtube.com/watch?v=Sbd4NX95Ysc>

For Future

Exhibit 1: Imitating Traditional Development Paths Is Impossible for Emerging Economies Nigeria would need over 700,000 additional doctors to reach OECD levels by 2030

Sources: World Bank, WHO, Africa Health Workforce Observatory, BMI, IFC, BCG



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

Cost:
US\$ 51 billion, equalling 20%
of GDP (2012) or 10 times
public health expenditure
(2012)

Duration:
300 years with existing
training infrastructure

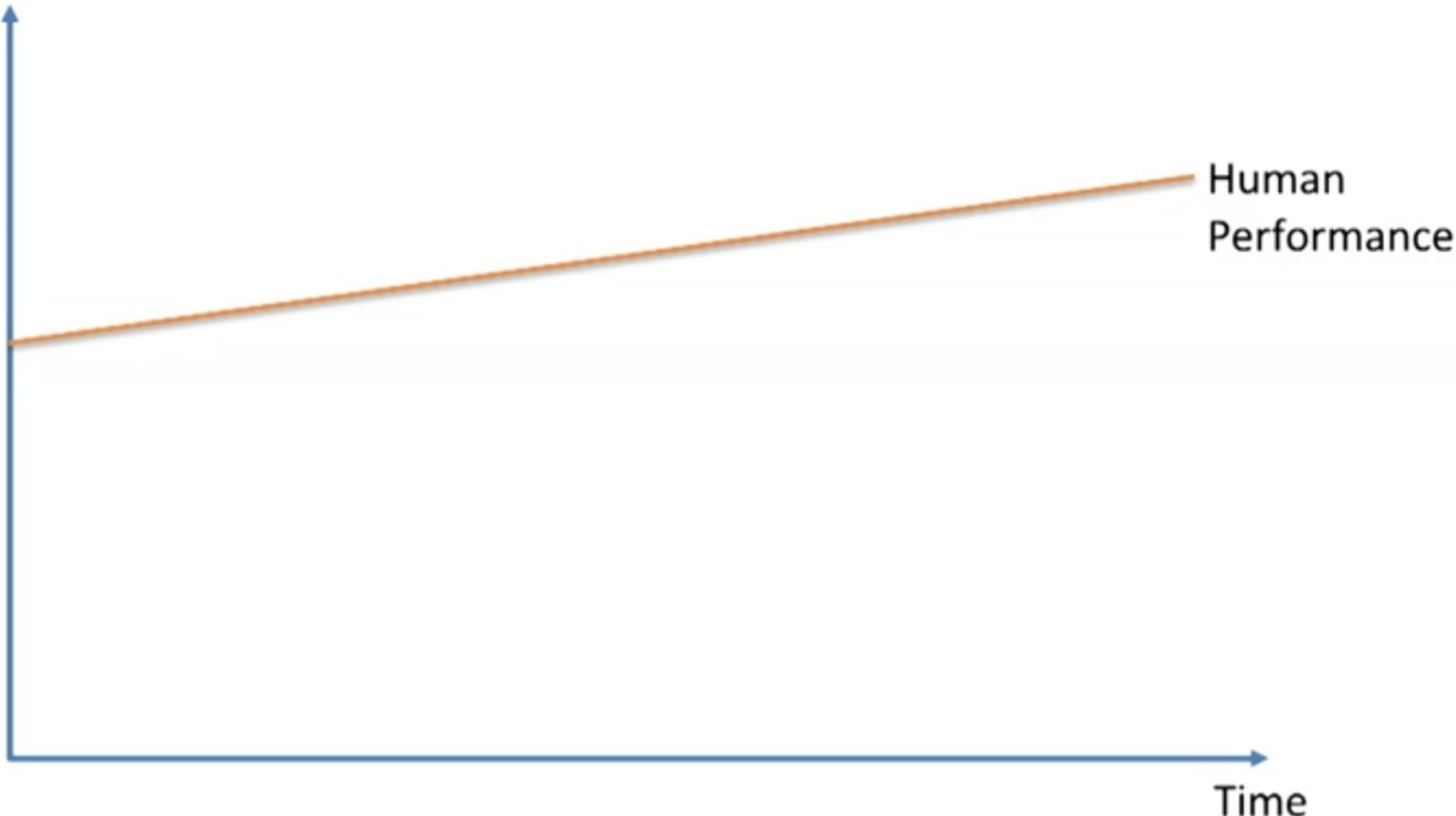
Reading &
Writing

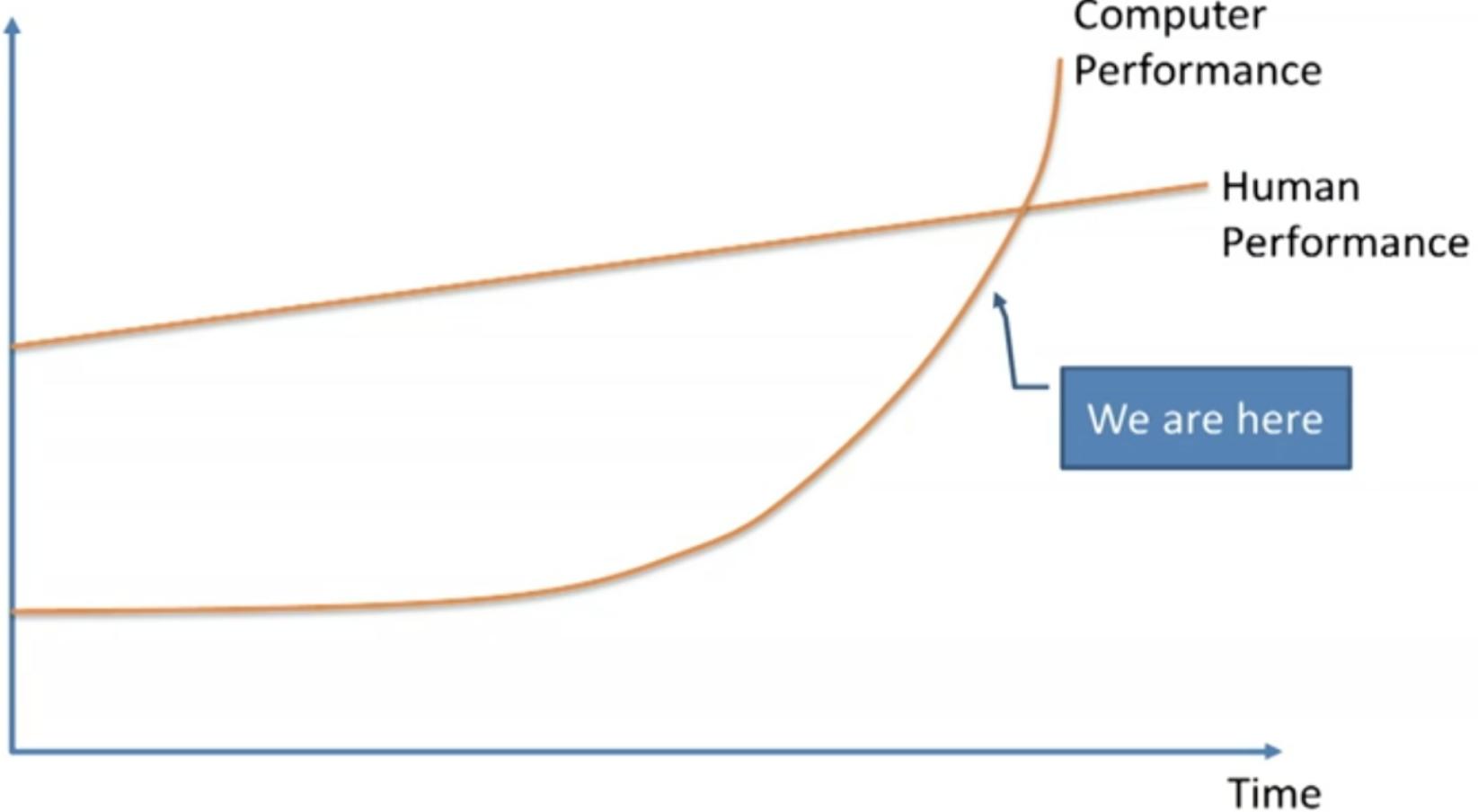
Speaking &
Listening

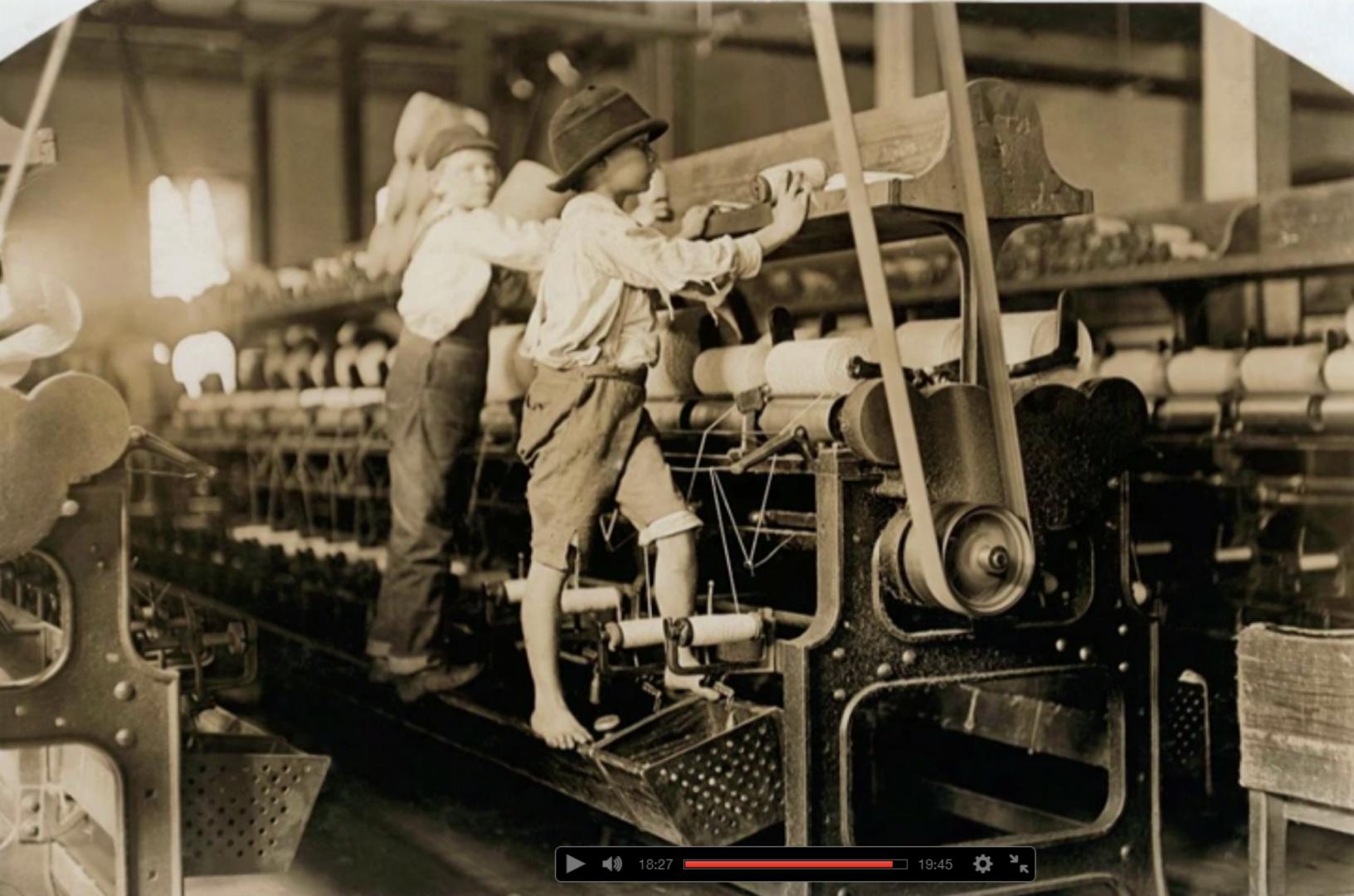
Looking at
things

Integrating
knowledge

- Driving cars
- Preparing food
- Diagnosing disease
- Finding legal precedents
- ...

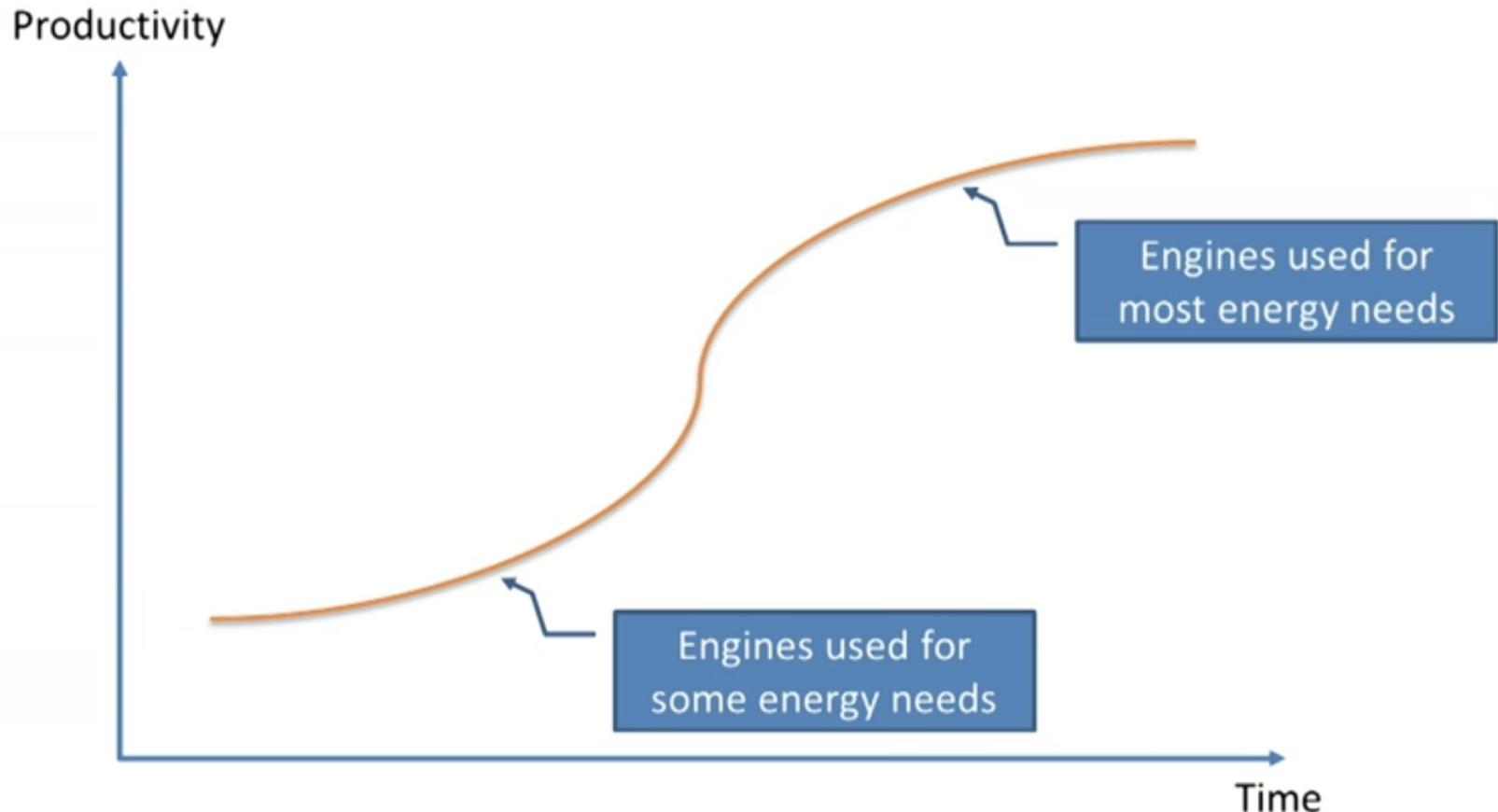






Children
working in a
mill in Macon,
Georgia, 1909

United States Library
of Congress's Prints
and Photographs
division [nclc.01581](#)



Productivity



Industrial
Revolution

Time

Productivity



Machine
Learning
Revolution

Industrial
Revolution

Time

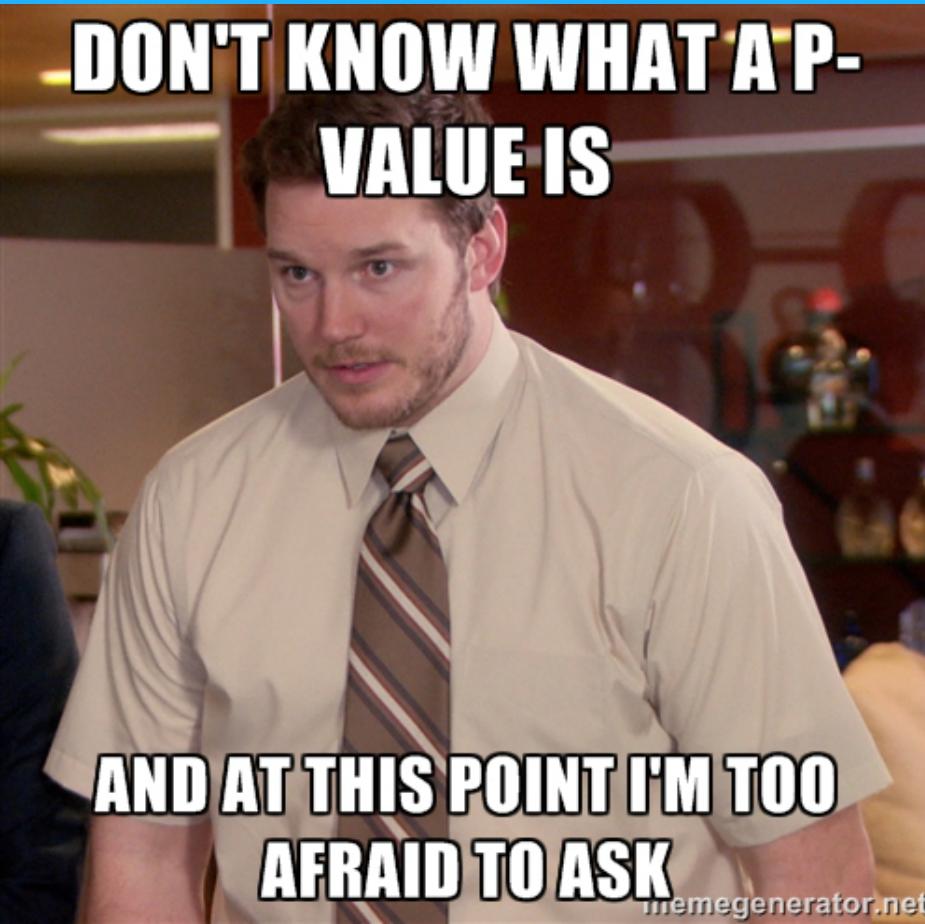
Future Jobs - Michio Kaku - Physicst

- Those of Artificial intelligence can't do
- Pattern recognition and common sense are big problem of AI
- Repetitive jobs will be wiped off
- Jobs involved in intellectual capitalism will shine like
 - Leadership
 - Creativity
 - Analysis
 - Imagination
 - Telling joke
 - Writing a story, script

How to Tame it?

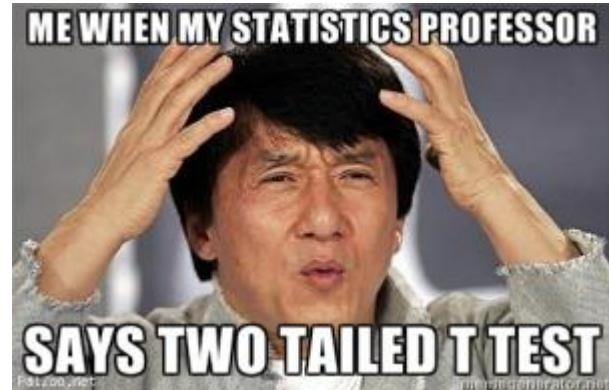
Revise Statistics and Probability

**DON'T KNOW WHAT A P-
VALUE IS**



**AND AT THIS POINT I'M TOO
AFRAID TO ASK**

memegenerator.net



ME WHEN MY STATISTICS PROFESSOR

SAYS TWO TAILED T TEST

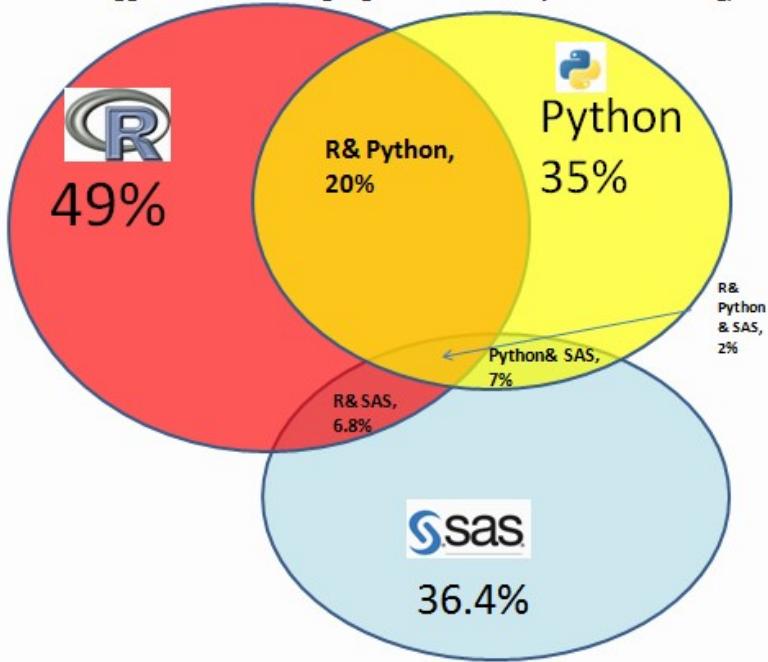
Learn algorithm how it works rather concentrating on output

HOW IT WORKS



Learn and practice a programming language

KDnuggets 2014 Poll: Languages used for Analytics/Data Mining, 2



```
208 limit_val = a;
209 $("#limit_val").a(a);
210 update_slider();
211 function(limit_val);
212 $("#word-list-out").e(" ");
213 var b = k();
214 h();
215 var c = l(), a = " ", d = parseInt($("#slider_shuffle_min").val());
216 arseInt($("#slider_shuffle_max").val());
217 function("LIMIT_total:" + d);
function("rand:" + f);
function("rand:" + f);
function("check_if_in_limit:" + f);
function("check_if_in_limit:" + f = d, function("check_if_in_limit:" + f = d);
```

Big data and Data science are happily married



Practice all algorithm with each use case



Make use of Kaggle and Analytics vidhya

kaggle



TECHGIG

hackerearth

Contribute your work to Opensource



Write a blog



Make your resume attractive

MOHAMED NOORDEEN A
Data Scientist
Tiger Analytics
nursnaaz@gmail.com

<https://www.linkedin.com/in/nursnaaz/>

<https://github.com/nursnaaz/>

www.technaaz.com

(+91) 9789-830021

SUMMARY

Scientist with 6 years of experiences in advance analytics, Machine Learning, Data Mining, Text Analytics and Statistical Data analysis.



MOHAMED NOORDEEN A

Senior Software Engineer (Data Science)

TIGER ANALYTICS

CONTACT

- PHONE +91 97898 30021
- E-MAIL nursnaaz@gmail.com
- LINKEDIN www.linkedin.com/in/nursnaaz
- GITHUB [www.github.com/nursnaaz](https://github.com/nursnaaz)
- WEBSITE www.technaaz.com

SKILLS

MySQL JavaScript Python Java PySpark Scala D3.js Hadoop

DATA ANALYTICS PROFESSIONAL

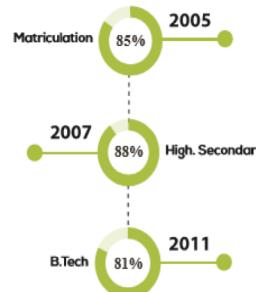
5 years of proven engineering abilities with acquired skills of mining hidden gems located within the large data sets of structured, semi-structured and unstructured data. The profound expertise will be used for improving organizational productivity and my own progress.

SAMPLE WORK IN ANALYTICS

Developed a forecast on industry shipment in the US home appliances for next two-quarters based on the past data. The forecast was done using univariate time series models like seasonal regression, SMA, WMA, and EMA. Later the model was the best fit with advanced time series model like ARIMA.

Image recognition using deep learning model. I even participated similar problems in online competitions like Analytics Vidhya and Kaggle and placed in top 10 leaderboard score.

ACADEMIC



CORE COMPETENCIES



CERTIFICATION

- 2017 Certified Program in Big Data Analytics & Optimization at INSOFE(pursuing)
- 2016 Certified Big Data Hadoop developer by Collabera TACT
- 2013 Oracle Certified Professional, Java SE 6 Programmer
- 2012 Oracle Database SQL Certified Expert

References

- [https://www.ted.com/playlists/310/talks on artificial intelligence](https://www.ted.com/playlists/310/talks_on_artificial_intelligence)
- <http://www.kdnuggets.com/>
- <https://www.youtube.com>
- <https://www.cubs100.org/GetImage.aspx?IDMF=ea11fbcd-1eb1-4829-9276-41f91b5bd75a&w=900&h=600&src=mc>
- <https://securityledger.com/wp-content/uploads/2016/05/IBM-Watson.jpg>

THANK YOU