

Career Options in A.I. & M.L

by

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3rd March 2020
Chennai





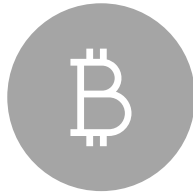
Every industry
is becoming a
software one



Why should I care?



Global spending on AI systems is forecast to reach \$77.6 billion in 2022



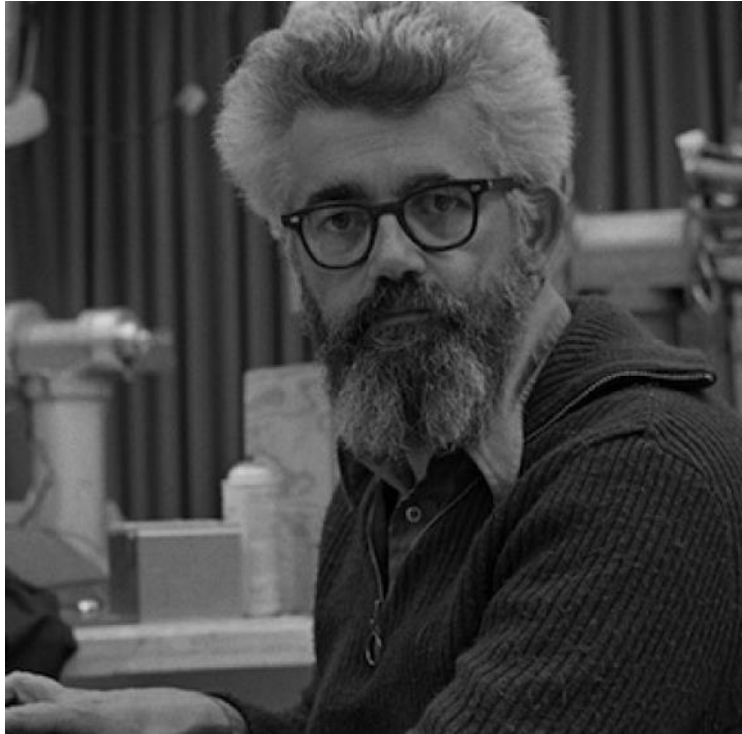
Deep learning techniques could enable the creation of between \$3.5 trillion to \$5.8 trillion in value annually.



Global GDP could be up to 14% higher in 2030 as a result of AI – the equivalent of an additional \$15.7 trillion.



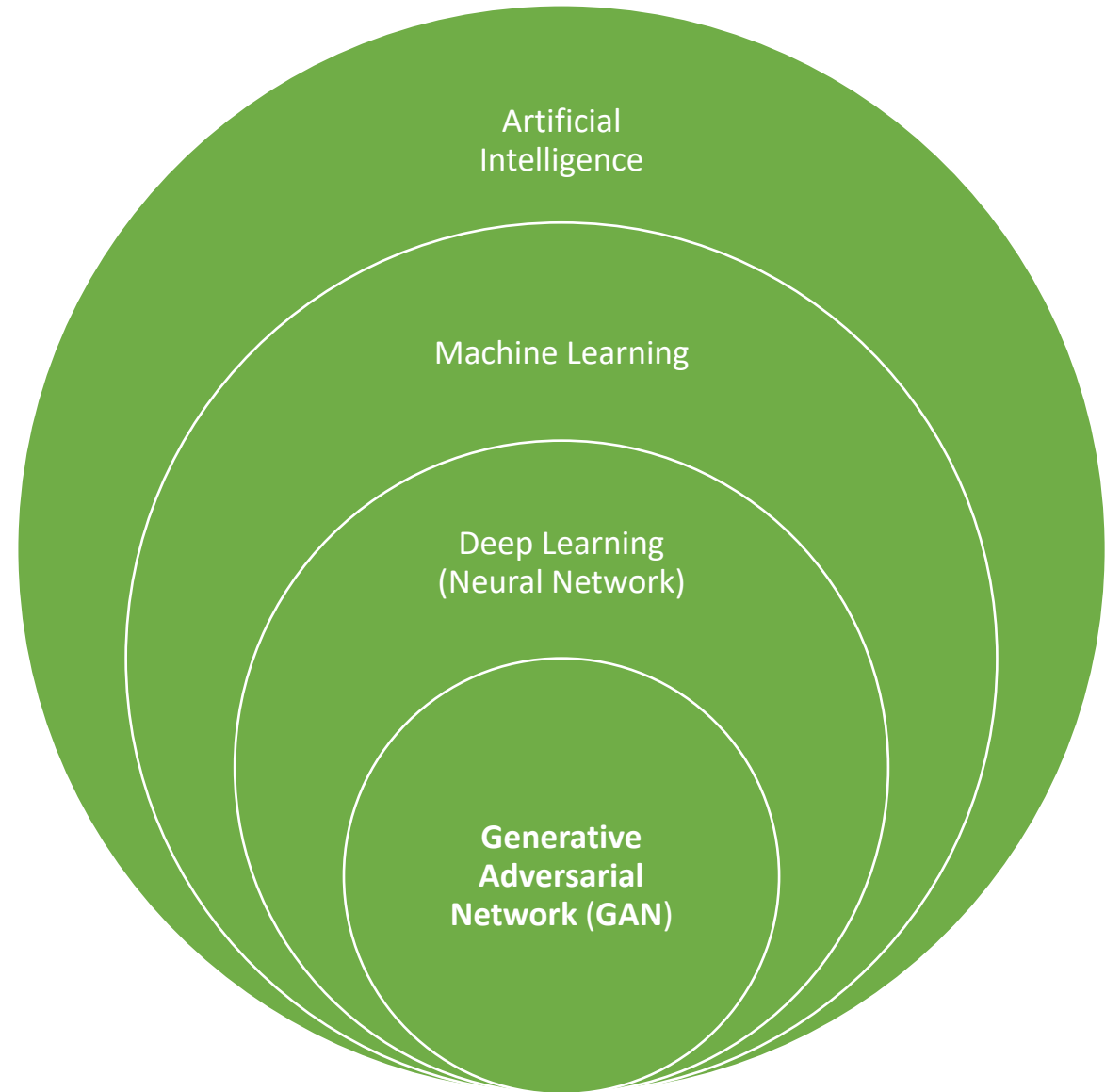
48% of executives at US companies surveyed in 2019 report they see AI as a path to growing revenue and increasing profits



*Artificial Intelligence is the
branch of computer
science
concerned with making
computers behave like
humans!*

John McCarthy of MIT
Circa 1956

What is ML? Neural Network?



Can AI write a movie review?

text.py



```
1 sess = gpt2.start_tf_sess()
2
3 gpt2.finetune( sess,
4               dataset=file_name,
5               model_name='124M',
6               steps=1000, restore_from='fresh', run_name='run1',
7               print_every=10, sample_every=200, save_every=500
8             )
9
10 gpt2.generate( sess, length=250, temperature=0.7,
11               ~ prefix="Kaipulla",
12               nsamples=5, batch_size=5
13             )
```

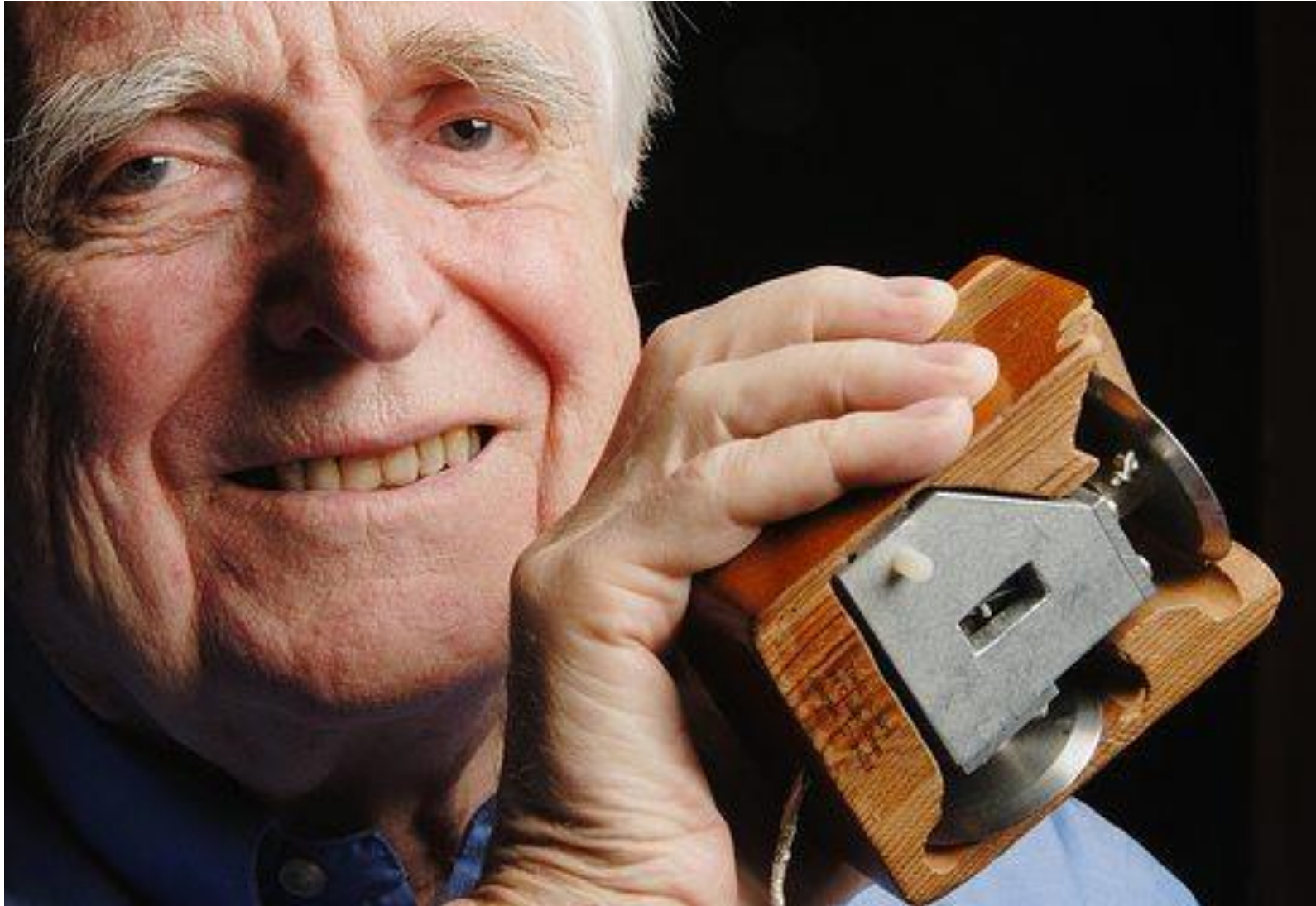
Output

Kaipulla is responsible for Raheem's death as he disapproved Raheem & Sangeetha's love, only to find out that he has nothing to do with Raheem's death.

Sathya's behavior becomes erratic. She travels around the city in search of someone and she's redecorated the house with green curtains and lights, and she has cooked Biriyanis, even though she has no experience in cooking. Pattukunjam and a few other maids inform Shiva about Sathya's strange behavior. Shiva meets his friend and psychiatrist, Ashok who advises Shiva to observe her behavior secretly. That night, Shiva returns home early. He hears a man's voice and smells a cigar burning. He heads to Sathya's room and is shocked to discover that Raheem's soul has possessed Sathya's body.

Shiva accesses the security footage at the railway station and discovers that a person, who was acting as a blind man is the killer. Shiva tracks down the killer and chases him, finally cornering him on a train coach with no passengers.

Kaipulla is the king of Chalapuram Paalayam. As foretold, he is foolish as well as lecherous. He is a puppet in the hands of Sangilimayan, who collaborates with the British for his own personal gain, and does not attend to the needs of the people of his kingdom. Pulikesi also tortures his subjects. He creates an outdoor stadium for different castes to fight against each other and punishes his palace guards even when they make the slightest of mistakes; he also uses his guards as targets for shooting practice.



*“Technology should **not** aim to **replace** the humans, rather **amplify** human capabilities.”*

- Doug Engelbart
The inventor of Computer Mouse

AUTOMATION RISK LEVEL

Totally Safe

or 3% probability of automation

PROJECTED GROWTH

6%

by 2024

MEDIAN ANNUAL WAGE

\$86,720

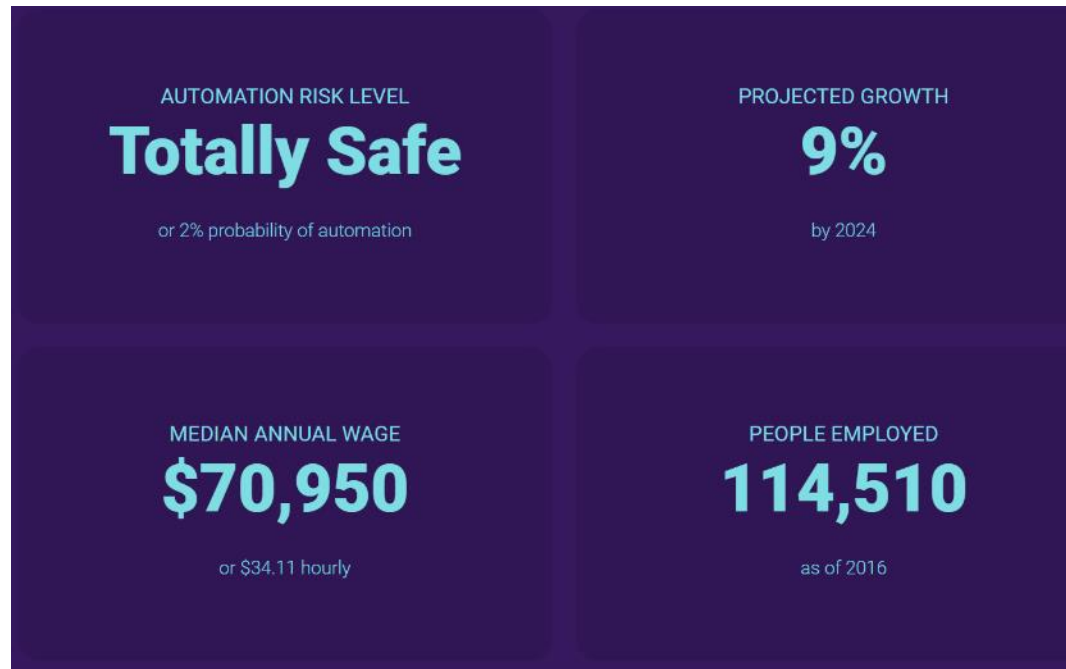
or \$41.69 hourly

PEOPLE EMPLOYED

25,410

as of 2016

Will "Health
and Safety
Engineers" be
replaced by AI
& Robots?



Will "Producers and Directors" be replaced by AI & Robots?

AUTOMATION RISK LEVEL

Start worrying

or 34% probability of automation

PROJECTED GROWTH

15%

by 2024

MEDIAN ANNUAL WAGE

\$45,160

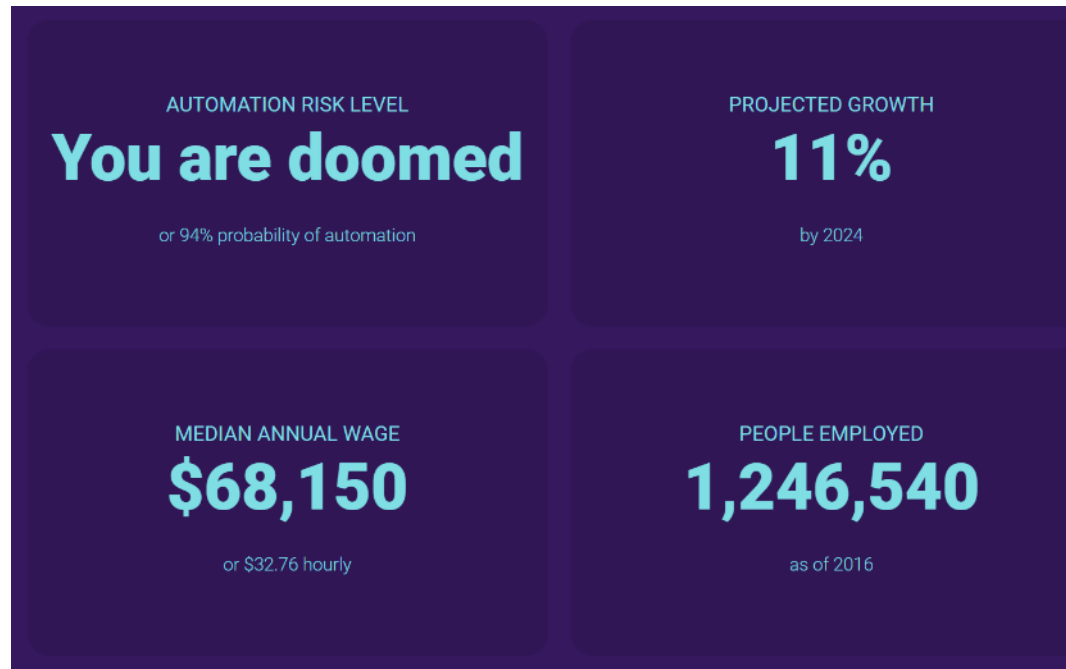
or \$21.71 hourly

PEOPLE EMPLOYED

105,720

as of 2016

What about
“Surgical
Technologists”?



What about “Accountants and Auditors”?

Major job roles in A.I.

1. **A.I. Scientist** – PhD in Mathematics (algebra, calculus, algorithms, probability, and statistics), Cognitive Science Theory, Bayesian Networking (including Neural Nets) & who can create Algorithms (MIT/Stanford).
2. **A.I. Scale Engineer** – Top-End Backend/Cloud Engineer. Knowledge of Programming, Infrastructure & Storage: HDFS, Apache Spark, Apache Hudi. Work with highly distributed data. Usage of Algorithms. Identify bottlenecks in models & regenerate. Develop Model pipelines.



Major job roles in Data

3. **Data Scientist** – Knowledge of Algorithms, Qualified Statistician, Mathematics, Love for Data, Data Drift & Build models and understand behaviour. Ability to convert a business problem** to a machine-learning problem.
4. **Data Engineer / Data Analyst** – Programming Skills, Data Structure & Formats, Python, SQL, JSON, Apache Avro & Apache Parquet formats, Data Quality Index & Intro to Statistics
5. **Data Labellers** – Microsoft Excel, Multiple Data Processing Tools, Jupyter Notebook, Trillium data quality & Ataccama Data Quality, Apache Spark
6. **Data Pipeline Engineer** – Analytic Skills, EDL routines, Programming skills, Data Processing Skills, Data Formats & Visualisation.

Enough of theory

Show me proof!





Glassdoor: 50 Best Jobs in America for 2020

	Job Title	Median Base Salary	Job Satisfaction
#1	Front End Engineer	\$105,240	3.9/5
#2	Java Developer	\$83,589	3.9/5
#3	Data Scientist	\$107,801	4.0/5
#4	Product Manager	\$117,713	3.8/5
#5	DevOps Engineer	\$107,310	3.9/5
#6	Data Engineer	\$102,472	3.9/5
#7	Software Engineer	\$105,563	3.6/5
#8	Speech Language Pathologist	\$71,867	3.8/5
#9	Strategy Manager	\$133,067	4.3/5
#10	Business Development Manager	\$78,480	4.0/5

Reference: [glassdoor.com/blog/the-best-jobs-in-america-2020/](https://www.glassdoor.com/blog/the-best-jobs-in-america-2020/)

Data Scientist - Azure Compute, Atlanta



Responsibilities

- Design new tools and processes to enable better data modeling, analysis, and experimentation
- Employ machine learning to detect and correlate problems
- Build models, simulation, scalable and automated analytical systems
- Drive improvements to the product design and architecture, leading to increased customer satisfaction
- Collaborate with experts from across the company to advance data science best practices
- Learn how to build and sustain engagement from all levels of an organization

Qualifications

- 1+ year of coding experience in data technologies like: Python, PERL, Java, C#, etc.
- 2+ years of experience using Data, Machine Learning (ML), or Artificial Intelligence (AI) to impact critical product or business decisions

ML Engineer II - Hyderabad



Responsibilities

- Develop highly scalable classifiers and tools leveraging machine learning, data regression, and rule-based models, deep learning
- Create language models from petabytes of text data in different languages
- Suggest, collect and synthesize requirements and innovate to create next generation feature sets
- Work as part of the product team to implement algorithms that power user and developer-facing products reaching out to millions of users.
- Be responsible for measuring and optimizing the quality of your algorithms and Models
- Adapt standard machine learning methods to best exploit modern parallel environments

Qualifications

- BS/MS degree in Computer Science or related quantitative field with 4-8 years of relevant experience
- Strong background in one or more of Machine Learning, Artificial Intelligence, Pattern Recognition, Natural Language
- Programming, Deep Learning, DNNs, Large scale Data Mining
- Experience with scripting languages such as Perl, Python, PHP, and shell scripts
- Experience with recommendation systems, targeting systems, ranking systems or similar systems
- Experience with any of Hadoop/Hbase/Pig or Mapreduce/Bigtable or R/Matlab/AzureML or similar technologies

For PhD Students or Recent Graduates: Machine Learning, Redmond



Responsibilities

- Experience in Object Oriented programming.
- Solid understanding of cloud development principles and patterns such as loose coupling, clean separation of services and scaled out parallel processing. Nice to have experience with Azure or AWS.
- A strong background in data structures, algorithms and analysis of algorithm complexity.
- Experience in architecting highly-available and scalable software systems is highly desired.
- Excellent communication skills and ability to collaborate with data scientists, software engineers and program managers in multiple organizations.
- Familiarity or ability to quickly ramp up with machine learning, deep learning, data mining, and/or data science.
- Strong intellectual curiosity and passion about learning new technologies

Qualifications

- Currently has or is in the process of obtaining their PhD degree in Computer Science or related technical discipline, within 12 months of completion.
- Coding skills in C/C++, Java, Python or JavaScript/AJAX, database design and SQL, and/or knowledge of TCP/IP and network programming.
- A solid foundation in computer science, with strong competencies in data structures, algorithms, and software design.
- Research experience in Algorithms, Architecture, Artificial Intelligence, Compilers, Database, Data Mining, Distributed Systems, Machine Learning, Networking, or Systems.

AI Engineer 2, Berkeley



Responsibilities

- End-to-end hands-on ownership of machine learning features and various projects
- Quick Proof of Concept (POC) feature ownership around Deep Learning, mixed with traditional approaches. POCs typically result in rich experience for the organization and help us evaluate the feasibility of projects
- Algorithm development around some key research areas in machine learning. This requires constant paper reading, and staying ahead of the game by knowing what is and will be state of the art in this exciting field
- Working with other groups while maintaining clear differentiation and value in our specific offerings, and leading the path of value driven AI features that are innovative and deployable to real customers
- Taking initiative to learn the newest Reinforcement learning techniques


Qualifications

- 1+ years of experience developing in python
- 2+ years of AI/ML algorithm development experience
- Bachelors or advanced degree in computer science or related field
- Experience writing production code used by others


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Data Scientist

Capgemini Technology Services India Limited

 3 - 8 years

 Not Disclosed

 Bengaluru



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Posted: **1 day ago** | Openings: **1** | Job Applicants: **67**

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Job description

Qualifications

Bachelor or Master's degree

Job Description (Role & Responsibilities)

- 1) Ability to work with business and technology teams to build and deploy an analytical solution as per client needs.
- 2) Ability to lead a multi-location team working on multiple analytical/ data science projects.
- 3) Ability to multi-task, solve problems and think strategically.
- 4) Experience with working on large data sets and developing scalable algorithms
- 5) Experience in leading an analytics/ data science project - both in terms of delivery as well as competency.

Primary Skills:

- 1) Minimum 3 years of experience and skilled in Python (incl. PySpark, Spark, MLlib)
- 2) Minimum 5 years of experience in Data Science (including SAS, Data Analytics, Data Science) and hands-on experience in analytical techniques including sampling, clustering, decision trees, SVM, Random Forest, regressions, deep learning etc.

Role	Clinical Research Associate/Scientist
Industry Type	IT-Software / Software Services
Functional Area	Medical, Healthcare, R&D, Pharmaceuticals, Biotechnology
Employment Type	Full Time, Permanent
Role Category	R&D

Education

UG :	Any Graduate in Any Specialization
PG :	Any Postgraduate in Any Specialization
Doctorate :	Doctorate Not Required

Home > Software En... > Bangalore

Software Engineer, Machine Learning

Google India Private Limited 4.5 ★ (168 Reviews)

5 - 10 years

Not Disclosed

Bengaluru

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Posted: 5 days ago | Openings: 1 | Job Applicants: 40

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Job description

Qualifications

Minimum qualifications:

- Bachelor's degree in Computer Science, or related technical field, or equivalent work experience.
- 5 years of relevant work experience.
- Experience designing and implementing distributed software systems (e.g. Java, C++, or Python).
- Research or Industry experience in Artificial Intelligence, Machine Learning (ML) models, ML infrastructure, Natural Language Processing or Deep Learning.

Preferred qualifications:

- MA/MS or PhD in Computer Science, or related technical field.
- A solid foundation in computer science, with strong competencies in data structures, algorithms, and software design.

About the job

As a Software Engineer, you will get a chance to choose from a myriad of projects: building signals and models for detecting bad users and rejecting fraudulent and abusive contributions, building tools that allow Google operators to efficiently provide labels for model training and the infrastructure on which all of this runs. You will also use your programming skills, develop intuition for working on open ended problem of signal detection and evaluation, and learn how Machine Learning can be applied to solve real world problems.

Google is passionate about organizing the world's information and making it universally accessible and useful. As more Internet users come online around the world, we aim to address the needs of people in developing countries, including India, Indonesia and the Philippines. The needs and computing paradigm of these users are uniquely differentiated and we look forward to providing them with the best products and services to suit their growing digital lives.

As part of this effort, you will work closely with engineering teams around the world to build great products and features.

Responsibilities

- Design, develop, test, deploy, maintain and improve ML models/infrastructure and software that uses these models.
- Manage individual project priorities, deadlines and deliverables.

Role	Software Developer
Industry Type	Internet / Ecommerce
Functional Area	IT Software - Other
Employment Type	Full Time, Permanent
Role Category	Programming & Design

Education

UG :	Any Graduate in Any Specialization
PG :	M.A in Journalism

[Home](#) > [SQL Jobs](#) > [Chennai](#)

Machine Learning

Accenture Solutions Pvt Ltd 4.0 ★ (13708 Reviews)

📅 5 - 9 years

📄 Not Disclosed

📍 Chennai



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Posted: 13 days ago | Openings: 1 | Job Applicants: 69

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Job description

- **Role** : Application Developer
- **Role Description** : Design, build and configure applications to meet business process and application requirements.
- **Must Have Skills** : Machine Learning
- **Good To Have Skills** : No Technology Specialty
- **Job Requirements** :
 - **Key Responsibilities** : Must to have skills: 1 5 - 7 years of experience in Artificial Intelligence, Machine Learning, 2At least 7 - 9 years of Architectural experience in Java, Microsoft TechStack, AI and Block Chain3Good knowledge on Data Analysis SQL 4Candidate should have architected at least 5 web app, portal, mobile web app, responsive app, content management app and systems integration solution independently Good to have: 1Automation Architect is the responsible authority with the requisite know
 - **Technical Experience** : Must to have skills: 1 5 - 7 years of experience in Artificial Intelligence, Machine Learning, 2At least 7 - 9 years of Architectural experience in Java, Microsoft TechStack, AI and Block Chain3Good knowledge on Data Analysis SQL 4Candidate should have architected at least 5 web app, portal, mobile web app, responsive app, content management app and systems integration solution independently Good to have: 1Automation Architect is the responsible authority with the requisite know
 - **Professional Attributes** : Must to have skills: 1 5 - 7 years of experience in Artificial Intelligence, Machine Learning, 2At least 7 - 9 years of Architectural experience in Java, Microsoft TechStack, AI and Block Chain3Good knowledge on Data Analysis SQL 4Candidate should have architected at least 5 web app, por

Role Technical Architect
Industry Type IT-Software / Software Services
Functional Area IT Software - Application Programming, Maintenance
Employment Type Full Time, Permanent
Role Category Programming & Design

Education

UG : B.Tech/B.E. in Computers
PG : M.Tech in Computers
Doctorate : Any Doctorate in Any Specialization, Doctorate Not Required

Gartner's 2020 Magic Quadrant For Data Science And Machine Learning



h2o.ai: Customer Data Scientist (Chennai)

Responsibilities and Duties

- Problem solve and assess technical problems, determine solutions, and work with internal engineering and customer teams to resolve them.
- Demonstrate ML solutions with engaging storytelling and technical accuracy.
- Architect, Design, and Deliver end to end machine learning workflows and systems from data ingestion to model deployment.
- Own account-related technical activities and relationships.
- Translate business use cases and requirements into technical ones.
- Communicate effectively to a diverse audience, including engineers, business people, and executives. Drive field feedback back into product development and be very hands-on for all technical activities.

Qualifications and Skills

- Bachelor's degree in engineering, computer science, mathematics or a related field. A graduate degree is a plus.
- 2+ years' experience with performing hands-on **Data Science and Machine Learning**
- Knowledge of a variety of machine learning techniques (clustering, decision tree learning, artificial neural networks, etc.) and their real-world advantages/drawbacks.
- Visualization skills using **R, Python** or other languages and frameworks.
- Knowledge of advanced statistical techniques and concepts (**regression, properties of distributions, statistical tests, and proper usage, etc.**) and experience with applications.
- Desirable: **Maker mindset, coachable, and have an urge to learn/master new technologies**

h2o.ai: Customer Engineering (Chennai)

Education

- Requires a B.Tech degree in Information Technology, Computer Science or equivalent
- This is an excellent opportunity to learn about machine learning as a member of our world-class team.

Qualifications and Skills

- Understanding of Data Science and Machine Learning concepts, Hadoop and Spark.
- Programming and troubleshooting knowledge in (one or more) Python, R, Java/Scala.
- Have some amount of systems troubleshooting skills in Linux, networking, docker, and security and cloud.
- Some understanding of H2O.ai products like H2O Core, Sparkling Water, Steam and Driverless AI is beneficial
- Knowledge of Microsoft Azure, AWS and Google Cloud Stack is a bonus.
- Must thrive in a fast-paced, time-compressed and dynamic environment.
- Needs to have an ability and willingness to learn new things.
- Effective written and verbal communications with all levels of an organization internally and externally.

h2o.ai: Full Stack Senior Software Engineer - Chennai

Education

- 3-10 years of previous experience in Product Development and Software Engineering
- Excellent programming ability
- Write high quality code. We work mostly in Python, Go and Typescript with some Java/Scala. **However, languages can be learned.**
- It's not expected that any single candidate would have expertise across all of these areas.
- We care much more about your general engineering skills than knowledge of a particular language or framework

What will you be doing?

- Design, build, configure, and test application software. Our architecture consists of a growing number of microservices, data visualization, enterprise services that drive our platform. Working on a small, dedicated service team, you will ensure your product and services are able to scale while maintaining high-performance in a 99.99% up-time environment.
- Collaborate with stakeholders across the organization such as experts in data science, product, design, infrastructure, and operations to build new features for Driverless AI related to machine learning model construction, evaluation, deployment and monitoring.
- Work with a wide range of systems and technologies to own and solve problems from end-to-end
- Uphold our high engineering standards and bring consistency to the many code bases and operations you will encounter

Databricks: Applied AI - SFO

As a Software Engineer, you will

- Shape the direction of some of our key data science areas for 2020 - usage forecasting, product analytics, user behavior and funnel analysis.
- Work closely with Product Management, Sales, Customer Success and other stakeholders to understand product usage patterns and trends and to make data-driven decisions and forecasts.
- Manage stakeholders for their focus area - gather changing requirements, define project OKRs and milestones, and communicate progress and results to a non-technical audience.
- Mentor and guide data-scientists on the team by helping with project planning, technical decisions, and code and document review.
- Build self-serving internal data products to make data simple within the company.

Competencies

- Experience in applying Data Science / ML in production to build data-driven products for solving business problems.
- Familiarity with Product Analytics - understanding and tracking customer and user behaviour using lenses like adoption, churn, cohorts and funnel analysis.
- Experience collaborating with and understanding the needs of stakeholders from a variety of business functions. We work most closely with Product, Customer Success and Engineering at the moment, but also work with the Sales, Marketing and Finance organizations.
- Strong coding skills in general purpose languages like Scala or Python, and familiarity with software engineering principles around testing, code reviews and deployment.
- Proficient in data analysis and visualization using tools like R and Python.
- Experience with distributed data processing systems like Spark and Hadoop, and proficiency in SQL.
- BS/MS/PhD in Computer Science, or a related field

Databricks: Data Platform – SFO

As a software engineer, you will:

- Design and implement reliable data pipelines using Spark and Delta.
- Establish conventions and create new APIs for telemetry, debug and audit logging data, and evolve them as the product and underlying services change.
- Create understandable SLAs for each of the production data pipelines.
- Develop best practices and frameworks for unit, functional and integration tests around data pipelines, and drive the team towards increased overall test coverage.
- Design CI and deployment processes and best practices for the production data pipelines.
- Design schemas for financial, sales and support data in the data warehouse.

Competencies

- BS/MS/PhD in Computer Science, or a related field
- Experience building, shipping and operating multi-geo data pipelines at scale.
- Experience with working with and operating workflow or orchestration frameworks, including open source tools like Airflow and Luigi or commercial enterprise tools.
- Experience with large scale messaging systems like Kafka or RabbitMQ or commercial systems.
- Excellent communication (writing, conversation, presentation) skills, consensus builder
- Strong analytical and problem solving skills
- Passion for data engineering and for enabling others by making their data easier to access.



MAKE IN INDIA

Startup

50 Business Ideas for 2020








Shradha Sharma

1

1 VR ARCADE

As virtual reality continues to gain interest, VR arcade is one such category that has the opportunity to take advantage of this momentum. As there is a lot of curiosity around this technology, people want to experience it firsthand and know what the hype is all about.

	Rs. 22.5 lakh to Rs. 25 lakh	
INVESTMENT		
<hr/>		
	-Gaming license -VR technology and hardware	
REQUIREMENTS		
<hr/>		
		
MARKET SIZE	CAGR	SEARCH VOLUME

SUMMARY

Time and again, we meet so many individuals who want to become entrepreneurs but don't exactly know where to start. People are looking for that one breakthrough idea. But breakthrough ideas don't come announced. All of those breakthrough ideas we now hear about started small. Entrepreneurs start by looking around and identifying a problem and then go about building a product or offering a service as a solution.

All you need in order to become an entrepreneur is just that, an idea that fills a void. And this is exactly where this ebook comes in. We have included six different categories along with a set of business ideas in each of those categories. In addition to just giving you a list of suggestions, we have also included other helpful information that might help put things in perspective.

For each of the ideas discussed in this ebook, we have included the market size and the compound annual growth rate (CAGR). This will help you understand what kind of potential each of the business ideas has. We have also included what would be the requirements to start a business under each of these ideas, along with the investment required to get started.

It doesn't matter which stage of your life or career you are in, we have something that might be suitable for everybody. We hope you enjoy reading this book as much as we enjoyed putting it together.

Becoming an entrepreneur is one of the most exciting journeys you will ever embark on and we hope this book will get you started in the right direction. Good luck!

2

Just like the gaming centers that were popular a decade ago, VR arcades operate in a similar fashion and take it a step further by providing a completely immersive experience. Since it is expensive to buy the technology and hardware that supports VR, the best alternative is a VR arcade.

If you are someone who looked for business opportunities in the VR domain, setting up a VR arcade is something you could consider. There is a tremendous opportunity in this space as VR and its applications will continue to grow in popularity.

Currently, VR arcades focus heavily on the gaming niche as it has been the most profitable segment. When you set up your VR arcade facility, it might help to stick to this niche. Your ideal customers will be gamers who have an appetite for VR but cannot afford a full-fledged home system yet. Typically, they are teenagers and young adults. For this reason, VR arcades have also become popular destinations for hosting birthday parties, gaming contests, and pizza parties, along with team outings and so on.

Since VR is an immersive experience that is both visual and physical, you have to make sure that your arcade is spacious enough for players to move around, wave, and swing their arms. The gaming setups at home do not offer the kind of experience that a VR arcade does, so you have to meet these expectations. In order to set up a successful VR arcade, you will need a decent space that will house a handful of gamers at any given time. You will also need all the technology infrastructure and VR hardware completely installed and available. This will be the majority of your upfront investment when you get into this business.

ONLINE & TECH

A book that is entirely dedicated to business ideas wouldn't be complete without including the online and technology category. The internet and technology have enabled a number of entrepreneurs to launch life-changing products and services. It is hard to imagine a world without the likes of Facebook, Amazon, and Google. Each one of us has personally benefited from these businesses.

Online and technology sector has produced the highest number of intelligent startups in the past decade. This sector has both revolutionized and disrupted countless industries. It has also fundamentally altered the way we live, work and consume technology. Because of the internet and technology, you could be sitting at home and running a thriving business. With just a computer and an internet connection, you can do anything. This was beyond imagination just a few years ago.

It is very clear that this sector shows no signs of slowing down. Therefore, it was very exciting to gather a list of business ideas for this category. We hope you find something that excites you just as much and inspires you to get started right away.

3

2 DRONE VIDEOGRAPHER

If you are someone who has always had a keen interest in photography, video making, and drones, you should definitely consider getting into the business of drone videography. It is a thriving space with growing demand. If you can combine your creativity with drone-flying skills, you will be surprised to see how big of an opportunity this can be.

	-Rs. 30,000 and above	
INVESTMENT		
	<ul style="list-style-type: none">-All drones must have a unique identification number (UIN)-Unmanned aircraft operator permit (UAEOP) from DGCA-DGCA permit for commercial drone operations	
REQUIREMENTS		
		
MARKET SIZE	CAGR	SEARCH VOLUME

50 Business Ideas : Yourstory

REINVENT

YOUR

BUSINESS

MODEL

How to Seize the White Space
for Transformative Growth

Foreword by **CLAYTON M. CHRISTENSEN**

BUSINESS MODEL ANALOGIES

TYPE	EXAMPLE	DESCRIPTION
AUCTION	Sotheby's, Priceline, eBay	Customers name their own price for a product/service. Unwanted products are sold to a large customer base.
ALTER THE USUAL FORMULA	Amazon	Amazon generates high profits on its positive working capital, because it holds little inventory and yet enjoys long payables like traditional booksellers do
BRICKS + CLICKS	Home Depot, Tesco, REI	Integrate both an online (clicks) and an offline (bricks) presence to browse, order, and pick up products.
BUNDLE ELEMENTS TOGETHER	iPod and iTunes, fast food value meals	Make purchasing simple and more complete by packaging related products together.
CREATE USER COMMUNITIES	Angie's List	Grant members access to network of quality information about services or goods; generate revenue through membership fees and advertisements.
CELL PHONE	Sprint, Better Place	Give away the "cell phone" for little to no cost but gain high margins by selling the "minutes" on a per-usage fee.
DEVELOP UNIQUE PARTNERSHIPS	MinuteClinic	MinuteClinic enables CVS to make money in ways other than visit fees (i.e., it gets customers into stores and exposes them to other CVS products).
DIAL DOWN FEATURES	Motofone	Target less-demanding consumers with products or services that may not be superior but are adequate and perhaps more convenient, simple, etc.
DO MORE TO ADDRESS THE JOB	UPS	Look beyond your typical offering and address other jobs your customers are trying to get done.
DISINTERMEDIATION	Dell	Deliver your standard product or service more directly to the customer through a new, non-standard channel.
FREEMIUM	LinkedIn, Skype, Pandora	Offer basic services for free but charge for upgraded or premium services.
LEASE INSTEAD OF SELL	Xerox	Allow customers the opportunity to pay for performance.
LEVERAGE NEW INFLUENCERS	Hindustan, Unilever	Identify new influencers that make the delivery of your offering more convenient, far-reaching, or affordable.
LOW-TOUCH APPROACH	Xiameter	Offer standardized, low-price version of a product or service that is traditionally customized and higher priced.
MULTI-LEVEL MARKETING	Amway, Avon, NuSkin	Market and sell products or services direct to consumers, outside of retail locations.
OWN THE UNDESIRABLE	AllLife	Seek to serve segments of the market that may not appear to be immediately attractive.
RAZORS/BLADES	Gillette, personal printers	Give away the "razors" for essentially no cost but make profits by selling higher-margin "blades."
REVERSE RAZORS/BLADES	iPod/iTunes	Give away the "blades" (iTunes) for essentially no cost but make profits by selling higher-margin "razors" (iPod).
SERVITIZATION OF PRODUCTS	IBM	Provide not only a one-time product offering but also an ongoing service offering attendant to the product.
SUBSCRIPTION	Magazines, Netflix, RahuPlays	Consumer pays a subscription price to gain access to the product or service.

Courtesy: HBR

How to start?



Any computer with a web browser will do



Code for Free: Google Colaboratory or Azure Notebooks



Relearn Mathematics & Learn Statistics



Start with Python language



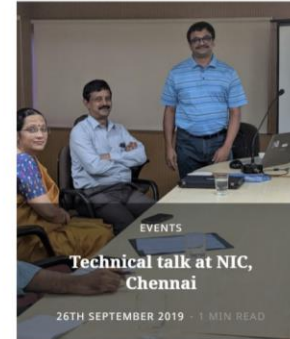
Learn PyTorch or Google Tensorflow

“The secret of a good sermon is to have a good beginning and a good ending; and to have the two as close together as possible.”

George Burns



Spotlight



About me

I am a white space leader living in Chennai. A Software entrepreneur with 20+ years' experience starting, growing and selling a company that operated in India, USA and UK. I am a Microsoft Regional Director (Honorary) from 1999 and IEEE Senior Member. Advisor, APJ Abdul Kalam International Foundation - House of Kalam, Rameswaram.

I am interested in movies, reading and travelling. You can follow me on twitter @venkatarangan.

Microsoft
Regional Director

Film Reviews



MOVIE REVIEW

Seeru (2020)

8TH FEBRUARY 2020 - 2 MINS READ

Seeru (சீறு) is a thorough brawn fight film coupled with sister sentiment and a bit of love. The movie started well, then drifted to becoming worse, to suddenly recover the lost ground and end with a pukka commercial climax. The



MOVIE REVIEW

Vaanam Kottattam (2020)

7TH FEBRUARY 2020 - 2 MINS READ

Vaanam Kottattam is a nice film that takes an oft-repeated storyline and makes it engaging. The pace of the screenplay which didn't dwell on any single happening for long, emotional dialogues that work, the

THE END

Appendix

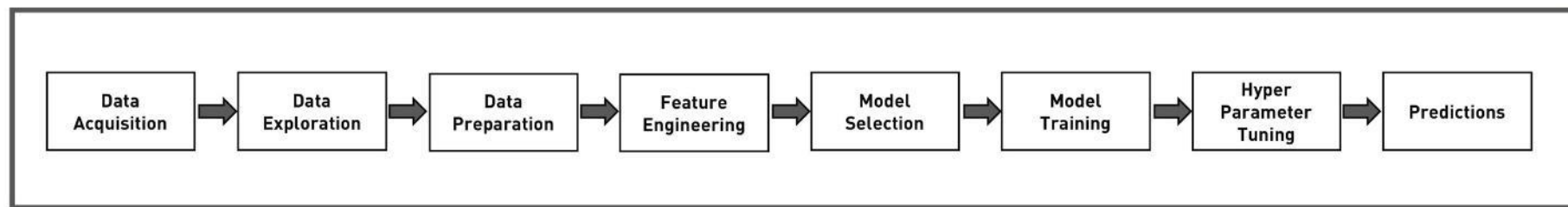


Analyzing historical speeches using Amazon Transcribe and Comprehend

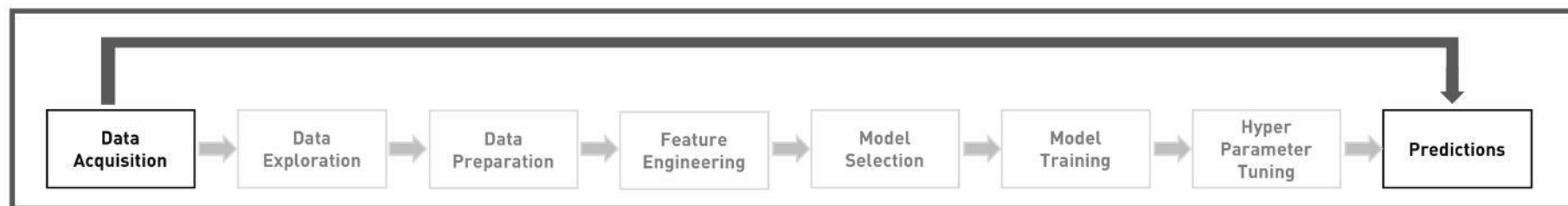
Reference:

towardsdatascience.com/analyzing-historical-speeches-using-amazon-transcribe-and-comprehend-636f39a0726a

AI/Data Jobs can be at risk too!



Traditional Machine Learning Workflow



AutoML Workflow

AutoML – Data acquisition and prediction

Automated ML – Use Cases

Classification	Time series forecasting	Regression
Fraud Detection	Sales Forecasting	CPU Performance Prediction
Marketing Prediction	Demand Forecasting	
Newsgroup Data Classification	Beverage Production Forecast	

