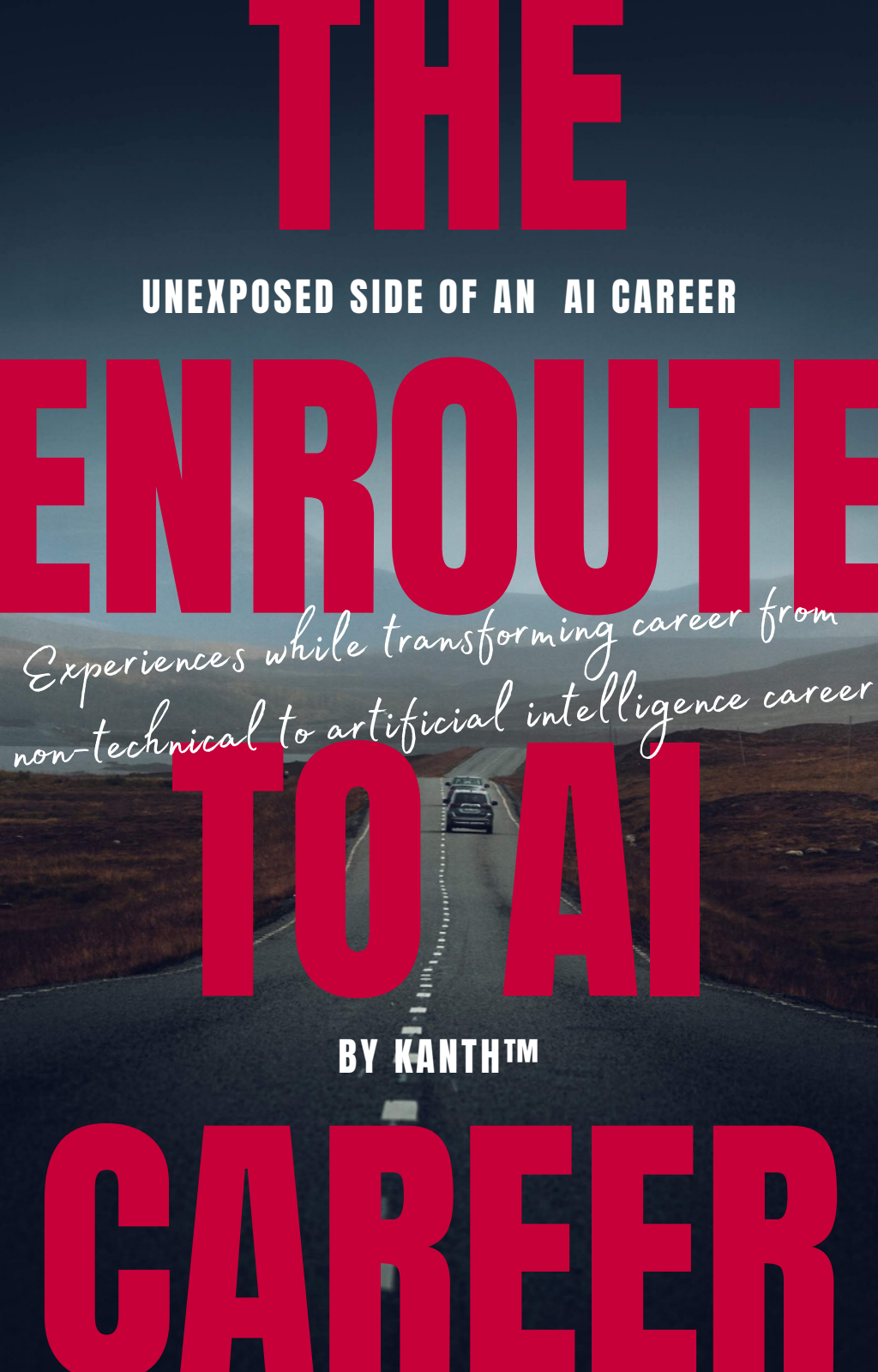
THE ENROUTE TO AI CAREER

UNEXPOSED SIDE OF AN AI CAREER



Experiences while transforming career from non-technical to artificial intelligence career

BY KANTH™

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MESSAGE FROM THE AUTHOR

I'm dedicating this book to every AI Learner, planning to pursue their career. I have written this book to share my experiences while transforming my career and challenges I faced, interviews I failed before getting into the job profile.

In this path of career transition no one going to help us 100%, some people laugh at us, some people ask us to drop this idea, some may point us we made a wrong decision, most of the time even you don't trust yourself.

Your career transition into AI or into any career demands bloody pain you need to endure for a long time to see the hidden beauty of success.

I'm into the situations, where no one helped me, I'm into the situations where I don't have projects to place in my resume, I'm into the situations where I don't know how to speak English, I'm into the situation where I don't know how to market my resume, I'm into the situations where I don't know how to speak in interviews, I'm into the situations where I thought career transition is so simple, I'm into the situations where I thought my friends, family, my mentors going to help me.But the fact is that we need to help ourself in every situation we are in.

I'm writing this book as a right guidance for every learner who is transforming to AI.

With Love

MY FIRST PAYCHECK

"I started my career as Six Sigma consultant and I received my first month salary as INR 3000 and next month I received around INR 6000."

— Kanth

MY JOB HISTORY

Before Six Sigma, *I'm a mechanical engineer, no job for 9 months. Got into Six Sigma training, In my training room, I'm the only fresher, and other participants are experienced around 10+ years.*

Literally I want the job, I can't take my step backwards, and I don't even have sweet time to relax and learn. So, I want to show significant impact in my training, I used to utilise my time, and I got the opportunity to work as Six Sigma person, but they don't pay me the salary for first 3months.

INR 5000 in my pocket for next 3months and I said yes to the job. I don't know how I created the way up to this point. Only one thing I believe in myself and in my decision which I made.

Before AI, *I'm in Six Sigma, Sales, Marketing, Training into Six Sigma, ITIL, PMP, Scrum, e.t.c.*

After AI, *I'm in AI, Trainings, Podcasting, Youtuber, Author, Blogging, Entrepreneur, e.t.c."*

— Kanth

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Chapter
How did I move into the AI Job Profile?

“Breaking the chaos of career transition with tenacity.”

Chapter-1: How did I move into the AI Job Profile?

I'm a mechanical graduate and got into a six sigma job profile and working under six sigma black belt consultants. Where I used to work on process excellence and process streamlining, most of my work involves analysing current processes and designing new processes which come up with new tools and less human involvement. Six Sigma strongly believes that we need to remove human participation and need to make an automated process for better operations. As a six sigma consultant, I used to identify different patterns using data and statistics but zero coding and more of Minitab software for all statistical analysis.

In 2014, I came to know about Machine Learning & Deep Learning, when I first addressed those words I thought of its more of Mechanical job profile. But while I'm researching machine learning, I came to know that making our computers to learn with less programming(At that point of time I didn't understand anything, completely confused by reading that definition).

We're pretty transparent with job profiles like Six Sigma person works on Process Excellence and Revenue saving, java developer on developing software, Database people on handling the databases and designing them, a tester on testing the code e.t.c. Still, I'm not clear with what a Machine Learning Engineer going to do.

Then started asking people about what is machine learning and how it works as a job profile. "Some people used to say machines are learning with algorithms" I used to ask how they learn and what are algorithms?

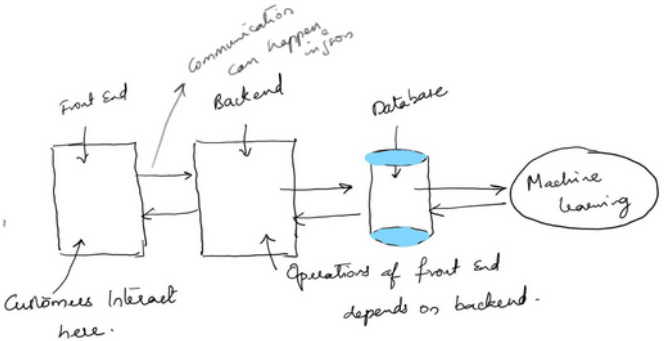
Chapter-1: How did I move into the AI Job Profile?

"They used to learn through programming" why programming? What is the purpose of programming? "Some people used to say nested loops are nothing but machine learning" I used to feel like god what exactly machine learning and what these people do in a real-time job profile.

I thought of doing a lot of research on my own and caught up around what are the applications of machine learning then i came to see amazon recommendations, loan approval or rejection, content suggestions in facebook, google ads targeting e.t.c, runs on machine learning. Various people said Machine learning is all about mathematics and programming, how people these great companies like amazon, google, apple e.t.c. are using machine learning into their websites and mobile applications? (Totally chaotic right!!)

Uffffff! So, I thought of understanding how mobile applications or web applications are made and thought of linking machine learning with web applications and mobile applications. Check out this diagram below which I constructed after reading a series of articles of more than 3-4days across 30-40 blogs and more.

I started linking machine learning into web applications and mobile applications and started questioning what the purpose of linking machine learning is into web or mobile applications? (For automation)

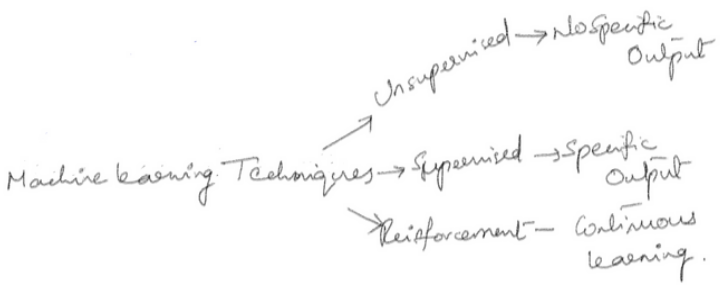


While understanding the pattern of every application of Machine Learning in the real world, I noticed one intriguing pattern. Machine learning builds a proactive approach towards customer purchases, proactive approach towards the failure of devices, a proactive approach towards loan approval e.t.c. Proactive means controlling a situation before a possible future outcome. So, with the help of machine learning, we are trying to control the future outcome like predicting heart disease, predicting loan approval or rejection e.t.c.

Unfortunately, I got the meaning of machine learning and purpose of machine learning engineer, now I need to learn them and need to implement them, but to implement good knowledge of programming is required. Still, I didn't know which programming language to choose like SAS, R, Python e.t.c. Again started researching on why programming and what are the limitations of every programming language and when to use? Where to use?? (Most of my learning curve is all about self-study)

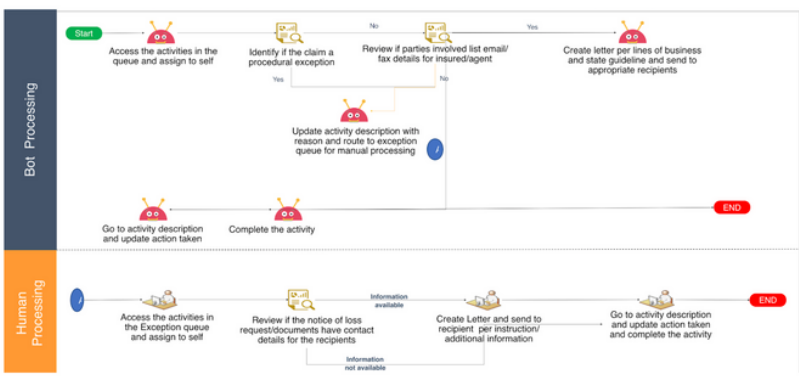
I started learning various things like supervised learning, unsupervised learning, semi-supervised learning and reinforcement learning(Check below diagram). For every topic, I used to search for why and when? Few basic algorithms of supervised and unsupervised learning
(Haaa! totally confused!!!)
Seriously, I didn't get why I learnt all these, and it got difficult to remember all those mathematical things. I used to get a lot of errors while implementing them through programming.

At some point, I used to feel like I needed to give up on this machine learning, but some sort of tenacity held me to continue with machine learning. Now I need to break this confusion. So, I decided to implement whatever I learnt on my current work as a small Proof of concept just to know how exactly it works on my dataset.



Future Process:

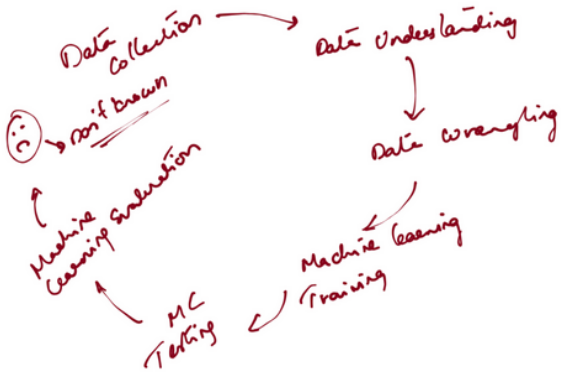
When I started working on my AI project, I picturised everything like how my new process needs to look like, and I came to know that there are many technologies need to be added to drive one automation.



I used technologies like RPA(Robotic Process Automation), Big Data, Data Science, Software development, IoT, e.t.c. Still, when I read on internet AI is all about algorithms & programming language.

Even now, when I speak with various students, professionals and leaders, they feel AI is all about algorithms like machine learning & deep learning, close to 90% feel that AI is all about

The above process is true still not complete AI Process. Then what is Artificial Intelligence & What are the components of the AI Project? (Are you thinking?)



9 Components of AI Project:
Every AI Project comprises of nine components to include to deliver the right value in the company.

- *Business Case*
- *ROI (Return on Investment)*
- *What are we improving? What are we automating*
- *Partial Automation/Complete Automation?*
- *What are the techniques for Automation?*
- *RPA*
- *Rule-Based*
- *Data-Driven automation using Machine learning/Deep Learning.*
- *Exact flow of the human-driven processA new process/automated process*
- *Nature of deployment & security*
- *Customer/User Satisfaction*