Data Science, Machine Learning, Artificial Intelligence **Project Guidelines and** SYLLABUS

YIQIAO YIN

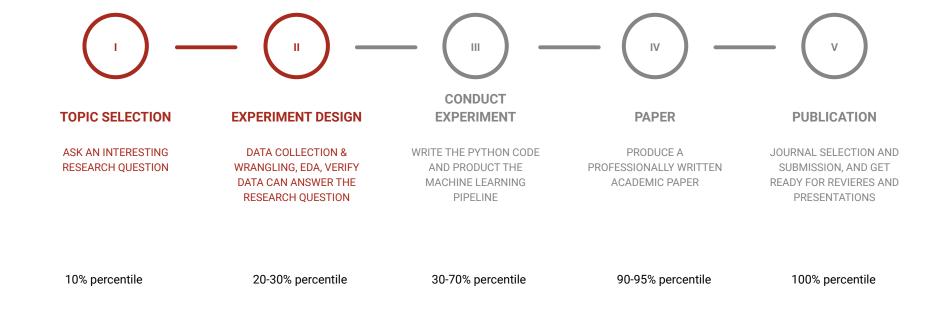
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CONTENT

- AI RESEARCH MILESTONE
- STEP BY STEP BREAK-DOWN
- TECH PLATFORM AND DATABASE MANAGEMENT





AI RESEARCH MILESTONE



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TOPIC SELECTION

ASK AN INTERESTING RESEARCH QUESTION

YOUR RESEARCH TOPIC HELPS THE WORLD AND IT ANSWERS QUESTIONS THAT CONTRIBUTE TO THE SOCIETY.

ELEMENT I

YOUR RESEARCH TOPIC REQUIRES CERTAIN SKILLS AND TECHNIQUES THAT CAN ADVANCE YOUR CAREER.

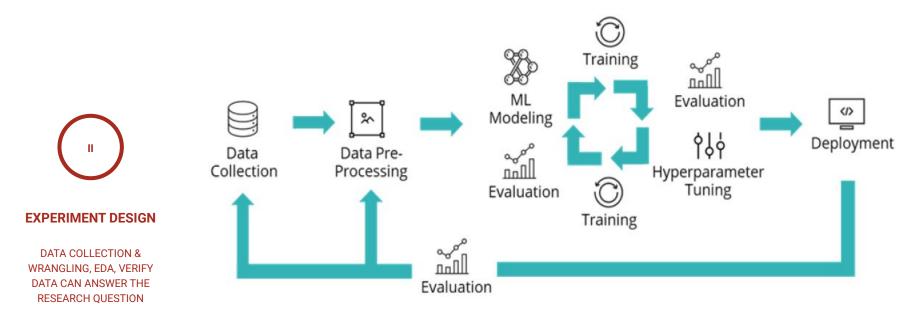
ELEMENT II

YOUR RESEARCH IS EASY TO BE ACHIEVED. EX: YOUR RESEARCH TOPIC CAN BE DONE WITHIN 10 WEEKS.

ELEMENT III

TOPIC SELECTION





Source: Data-Centric Al

EXPERIMENT DESIGN

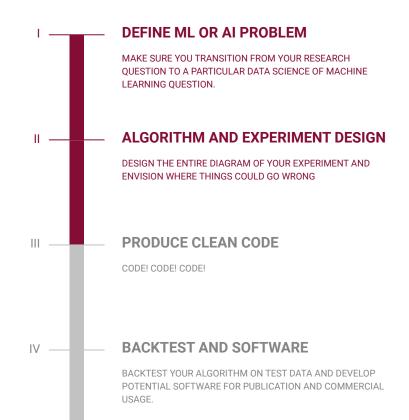




CONDUCT EXPERIMENT

WRITE THE PYTHON CODE
AND PRODUCT THE MACHINE
LEARNING PIPELINE

CONDUCT EXPERIMENT







PAPER

PRODUCE A PROFESSIONALLY WRITTEN ACADEMIC PAPER

CENTRAL IDEA

THE CENTRAL IDEA
NEEDS TO BE A GOOD
SELL!

RESULTS PRESENTATION

THE LAB AND
EXPERIMENT RESULTS
NEED TO BE CLEARLY
PRESENTED

LOGICAL FRAMEWORK

THE PAPER HAS CLEAR ILLUSTRATION OF THE LOGICAL FRAMEWORK OF YOUR EXPERIMENT.

FORMATTING

+

THE FORMATTING OF THE PAPER SHOULD FOLLOW JOURNAL REQUIREMENTS.

ACADEMIC PAPER

A PROFESSIONAL ACADEMIC PAPER NEEDS TO HAVE 4 PILLARS FROM THE LEFT:

- 1) CENTRAL IDEA
- 2) LOGICAL FRAMEWORK
- 3) RESULTS PRESENTATION
- 4) FORMATTING







PUBLICATION

JOURNAL SELECTION AND SUBMISSION, AND GET READY FOR REVIERES AND PRESENTATIONS

01	JOURNAL SELECTION	 HIGH SCHOOL: THIS IS THE MOST COMMON ONE COLLEGE JOURNAL: THIS IS SLIGHTLY MORE COMPETITIVE ACADEMIC JOURNAL: THIS IS THE MOST COMPETITIVE
02	SUBMIT YOUR JOURNAL	 SUBMIT PDF (SOMETIMES EDITORS ASK FOR LATEX) SUBMIT ANY GRAPHICS, SOUND, SUPPLEMENT IF AVAILABLE CHOOSE REVIEWERS (ASKED OCCASIONALLY)
03	DEBATE WITH REVIEWERS	 THIS IS UNLIKELY FOR HIGH SCHOOL OR COLLEGE JOURNALS THIS IS DEFINITELY REQUIRED FOR ACADEMIC JOURNALS
04	PUBLICATION	PROFESSIONAL ACADEMIC JOURNALS USUALLY ASK FOR A FEE CALLED ARTICLE PROCESSING CHARGES (FOR LARGE JOURNALS, THIS CAN BE UP TO 2000-3000 USD) THIS IS UNLIKELY FOR HIGH SCHOOL OR COLLEGE JOURNALS

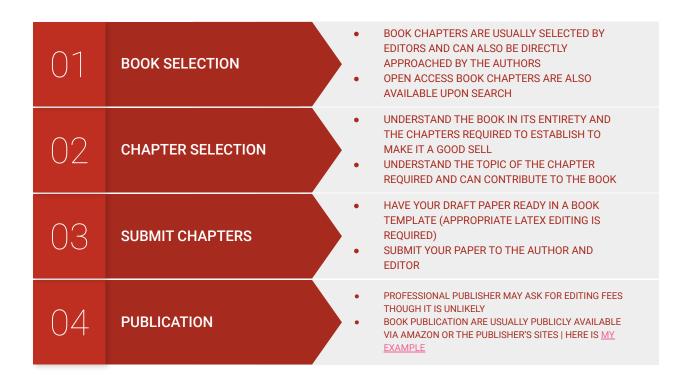
PUBLICATION





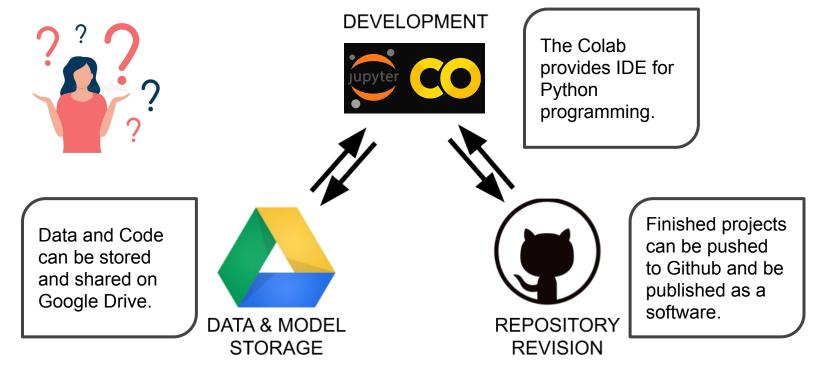
PUBLICATION

BOOK PUBLICATION IS ALSO AVAILABLE | INSTRUCTORS CAN LEAD STUDENTS TO WRITE BOOK CHAPTERS



PUBLICATION





DEVELOPMENT AND DATABASE MANAGEMENT

Math related courses, Grades, Some programming skills, develop math intuition and research Independent research, publications, network with advisors/mentors

Finish dissertation, choose a good department and network which university do you like to teach in, focus on publication

Publications, Tenure, Grants, Awards

ANY QUESTIONS?

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