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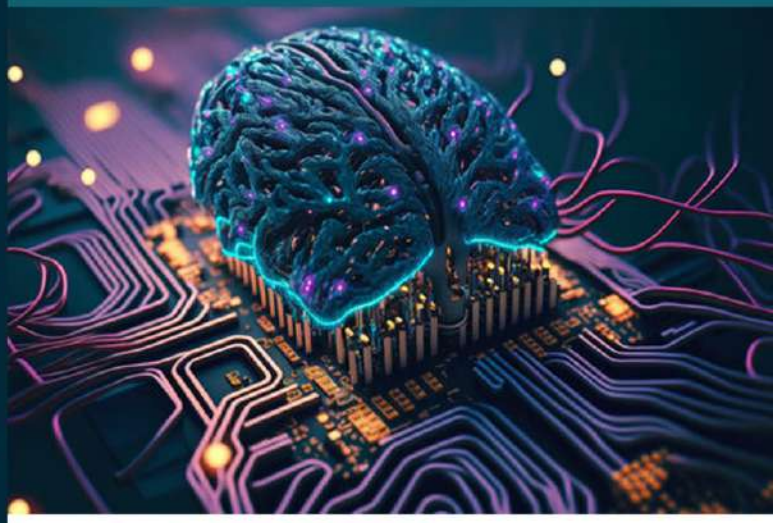

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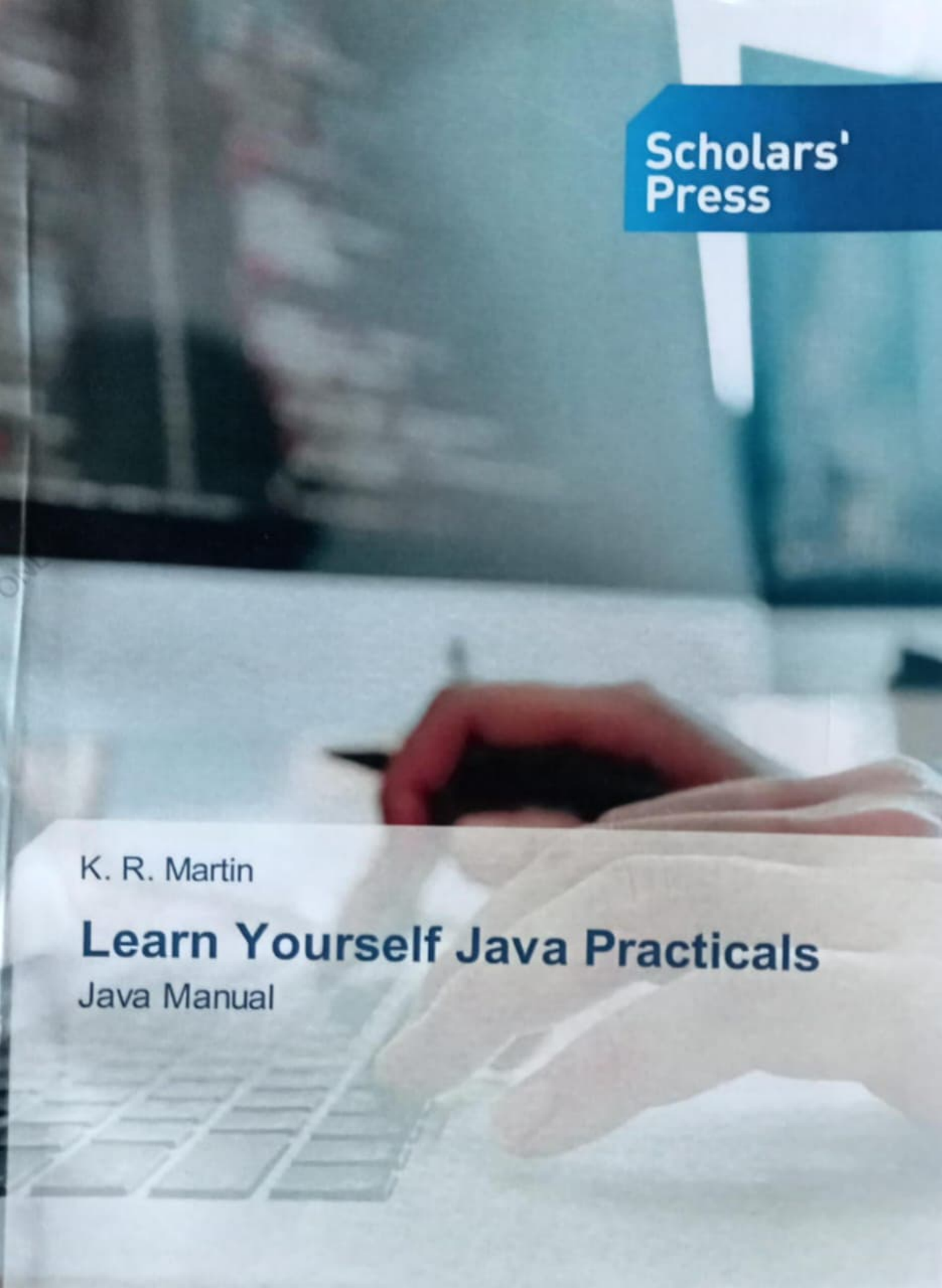

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AGILE METHODOLOGIES AND ITS APPLICATIONS

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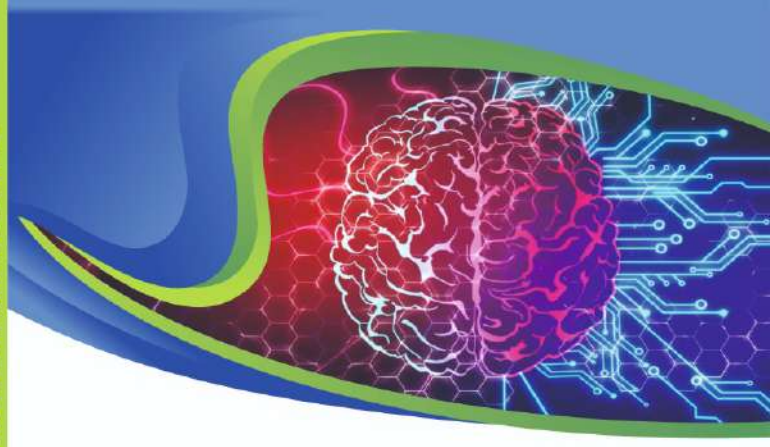

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Dr.B.Sugumar
Dr.J.Antony John Prabu
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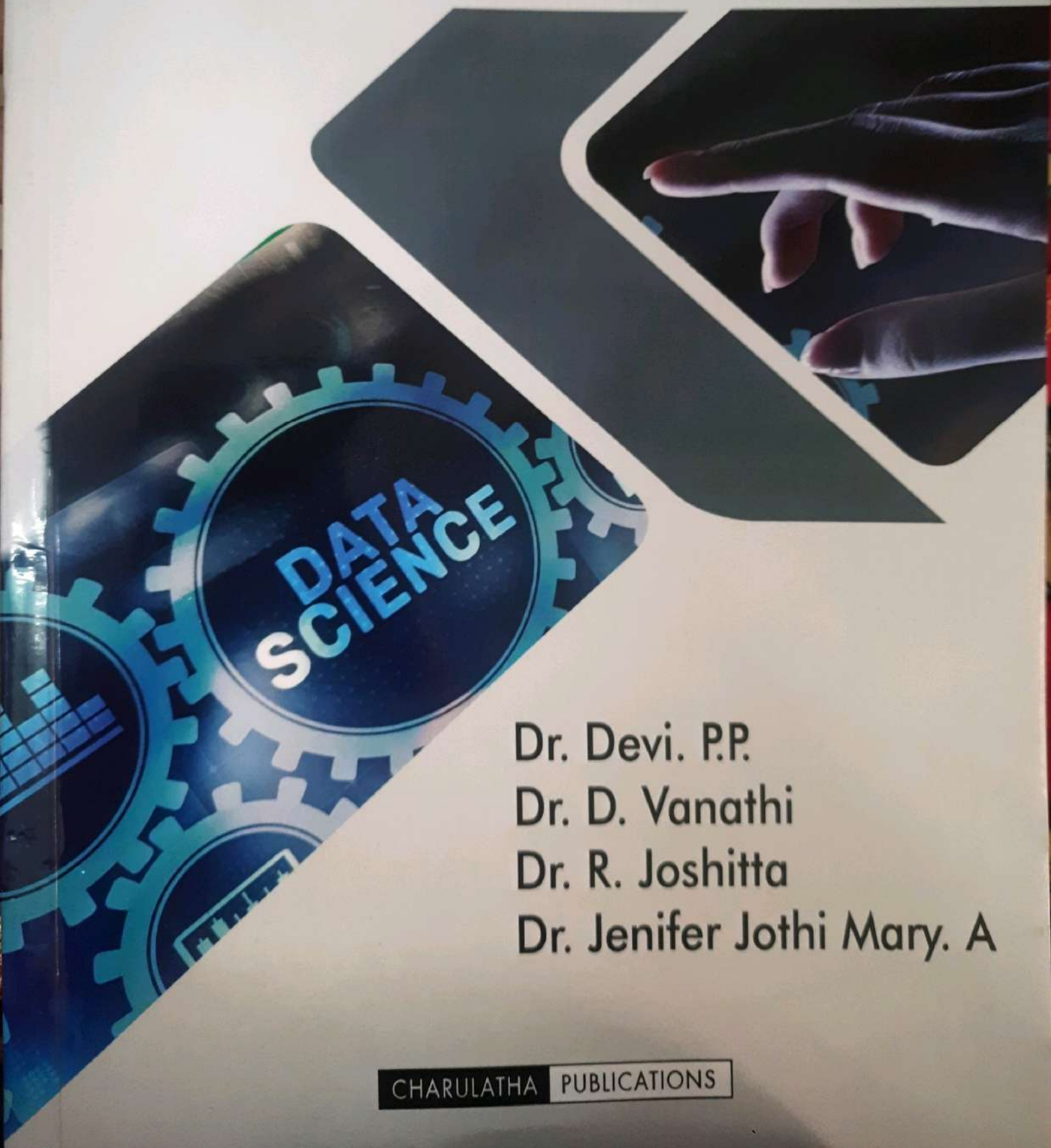

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CS3352 – SYLLABUS

UNIT I INTRODUCTION

Data Science: Benefits and uses – facets of data – Data Science Process: Overview – Defining research goals – Retrieving data – Data preparation – Exploratory Data analysis – build the model– presenting findings and building applications – Data Mining – Data Warehousing – Basic Statistical descriptions of Data

UNIT II DESCRIBING DATA

Types of Data – Types of Variables -Describing Data with Tables and Graphs –Describing Data with Averages – Describing Variability – Normal Distributions and Standard (z) Scores

UNIT III DESCRIBING RELATIONSHIPS

Correlation –Scatter plots –correlation coefficient for quantitative data –computational formula for correlation coefficient – Regression –regression line –least squares regression line – Standard error of estimate – interpretation of r2 –multiple regression equations – regression towards the mean

UNIT IV PYTHON LIBRARIES FOR DATA WRANGLING

Basics of Numpy arrays –aggregations –computations on arrays –comparisons, masks, boolean logic – fancy indexing – structured arrays – Data manipulation with Pandas – data indexing and selection – operating on data – missing data – Hierarchical indexing – combining datasets – aggregation and grouping – pivot tables

UNIT V DATA VISUALIZATION

Importing Matplotlib – Line plots – Scatter plots – visualizing errors – density and contour plots – Histograms – legends – colors – subplots – text and annotation – customization – three dimensional plotting – Geographic Data with Basemap – Visualization with Seaborn.

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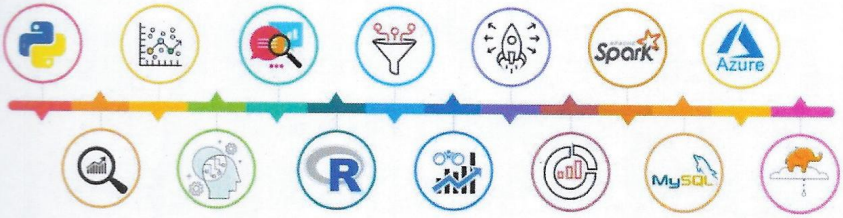

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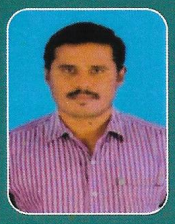

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(Lecture Notes)

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EXPLORING

THE INTERNET OF THINGS (IOT) WITH ARDUINO

A HANDS-ON GUIDE

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INTRODUCTION TO CAPITAL MARKETS

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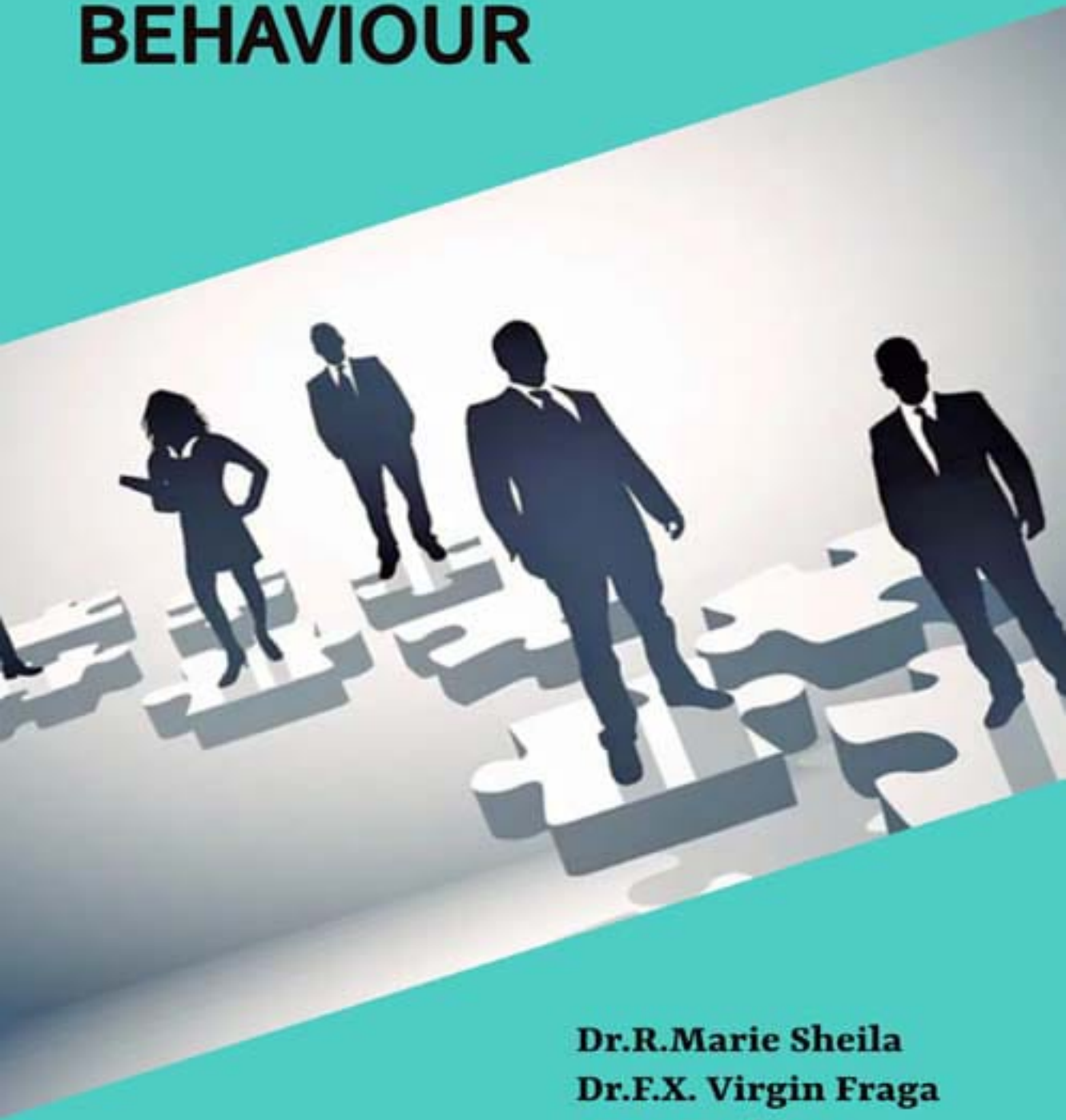

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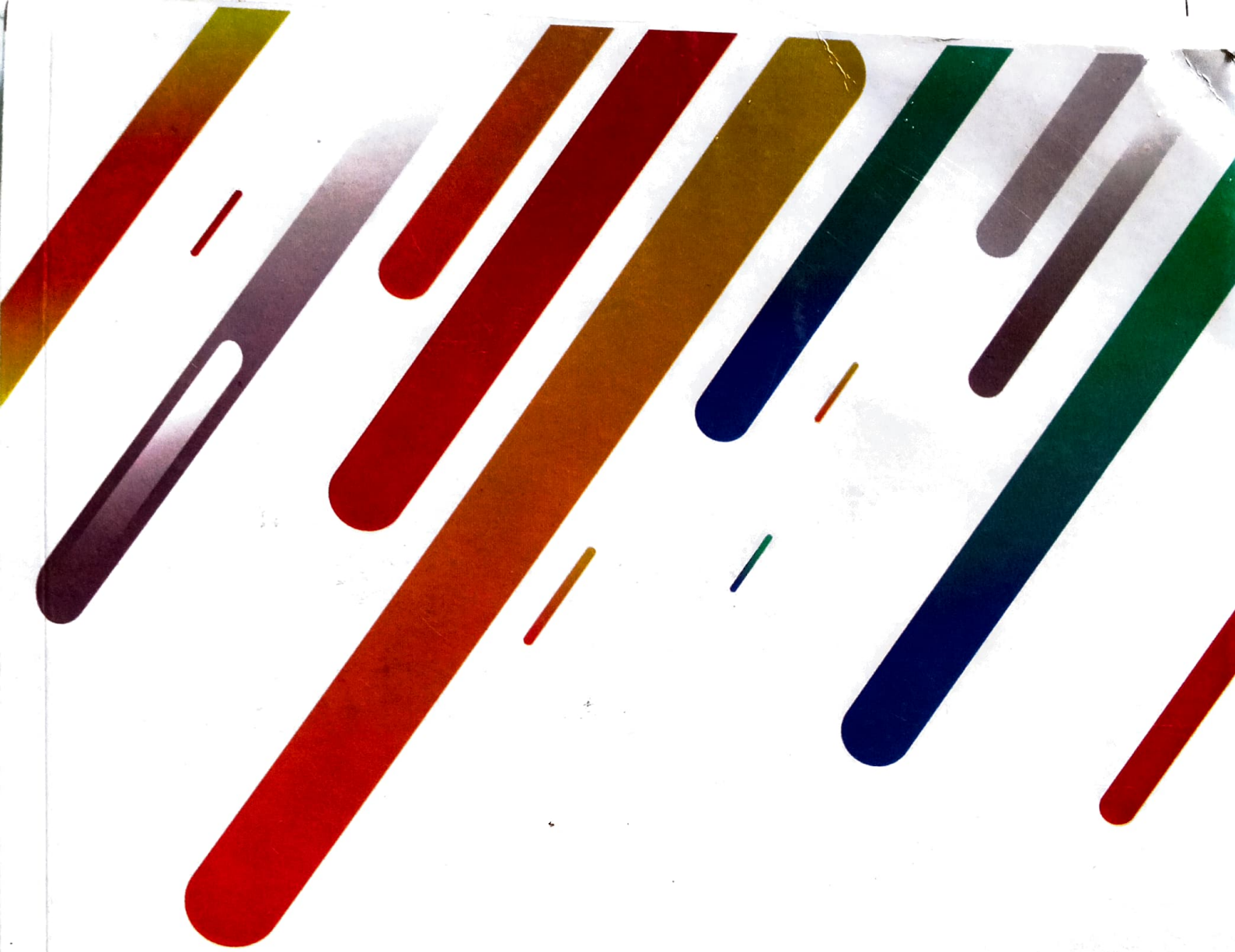

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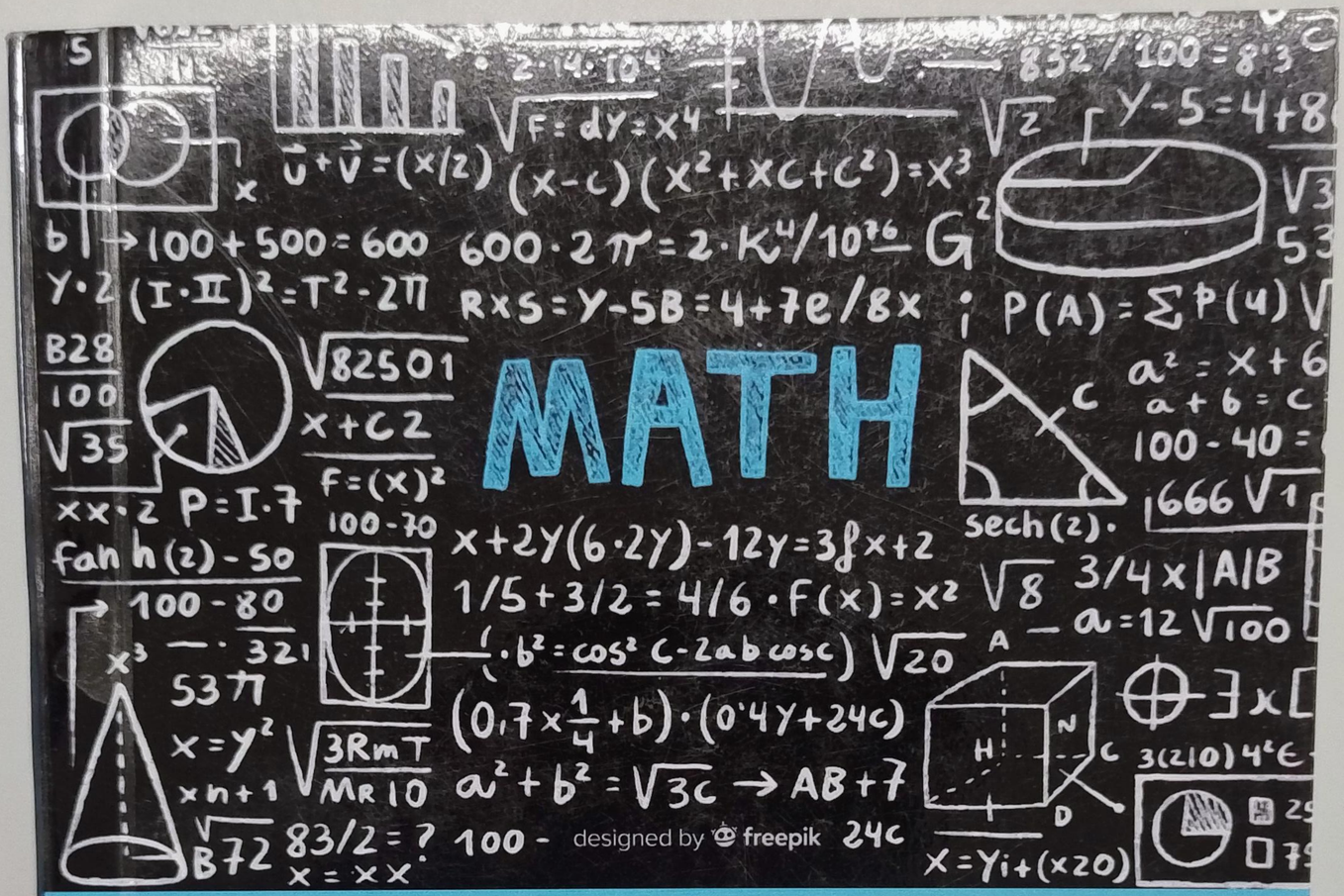

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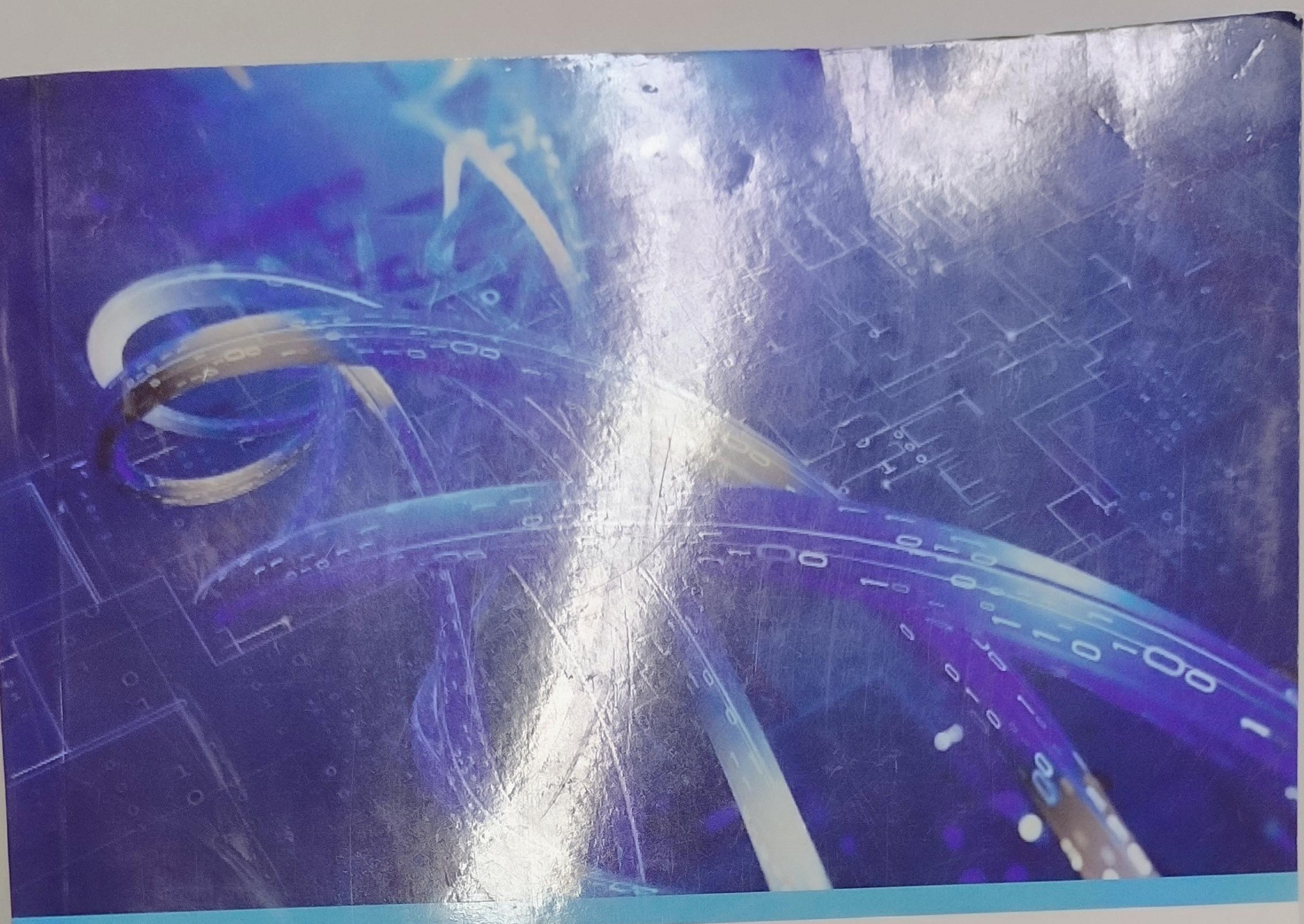

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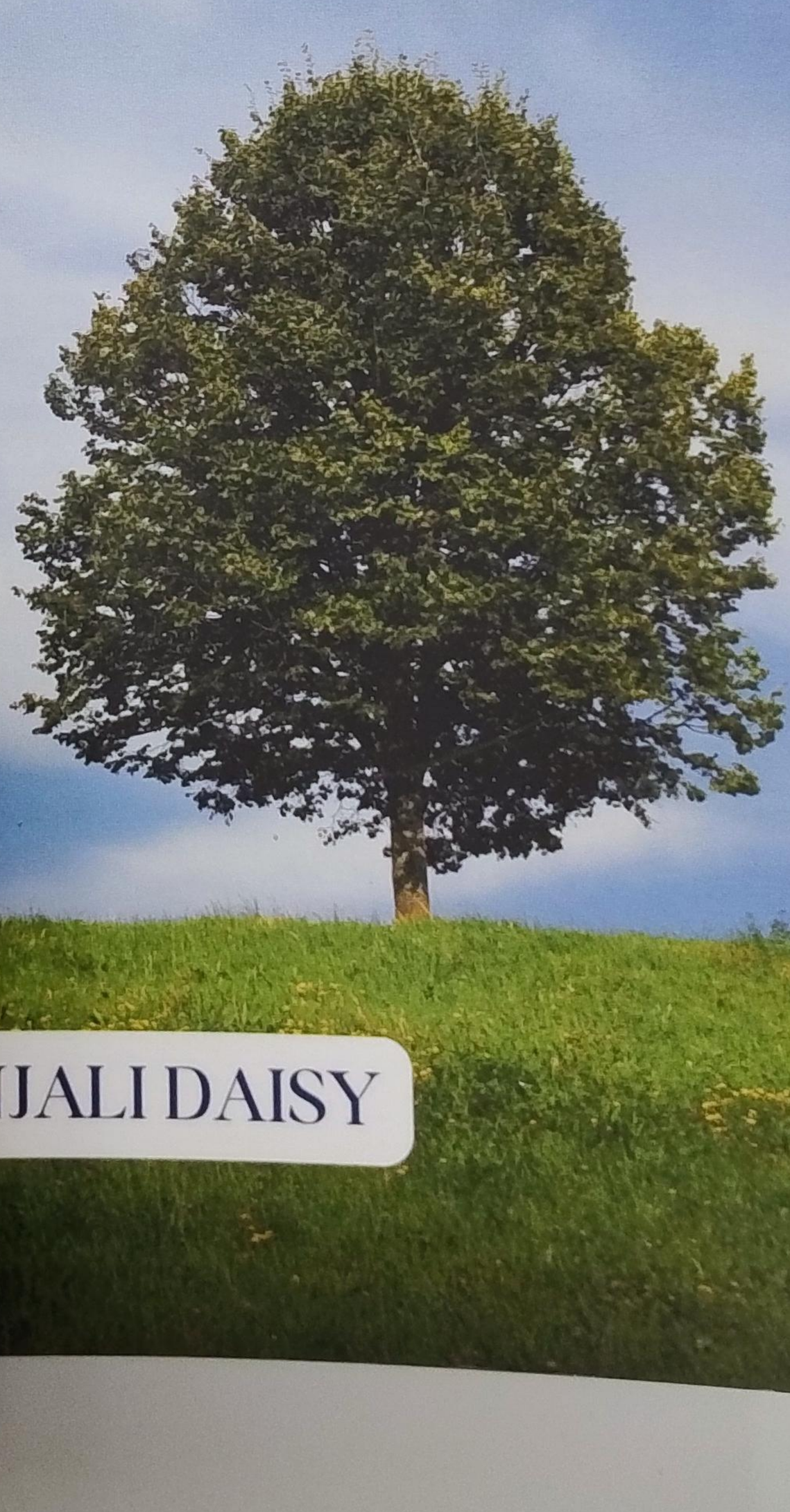

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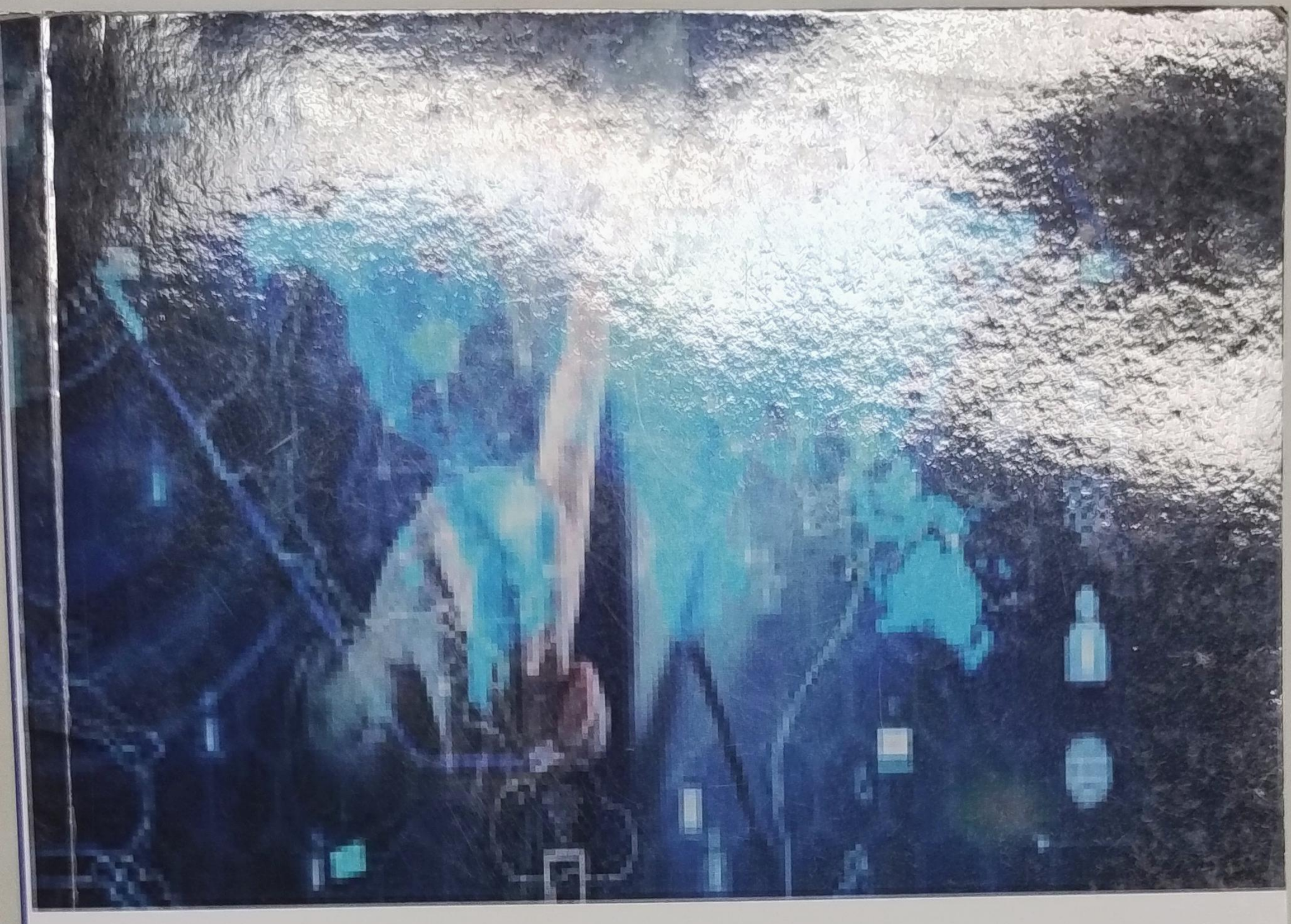

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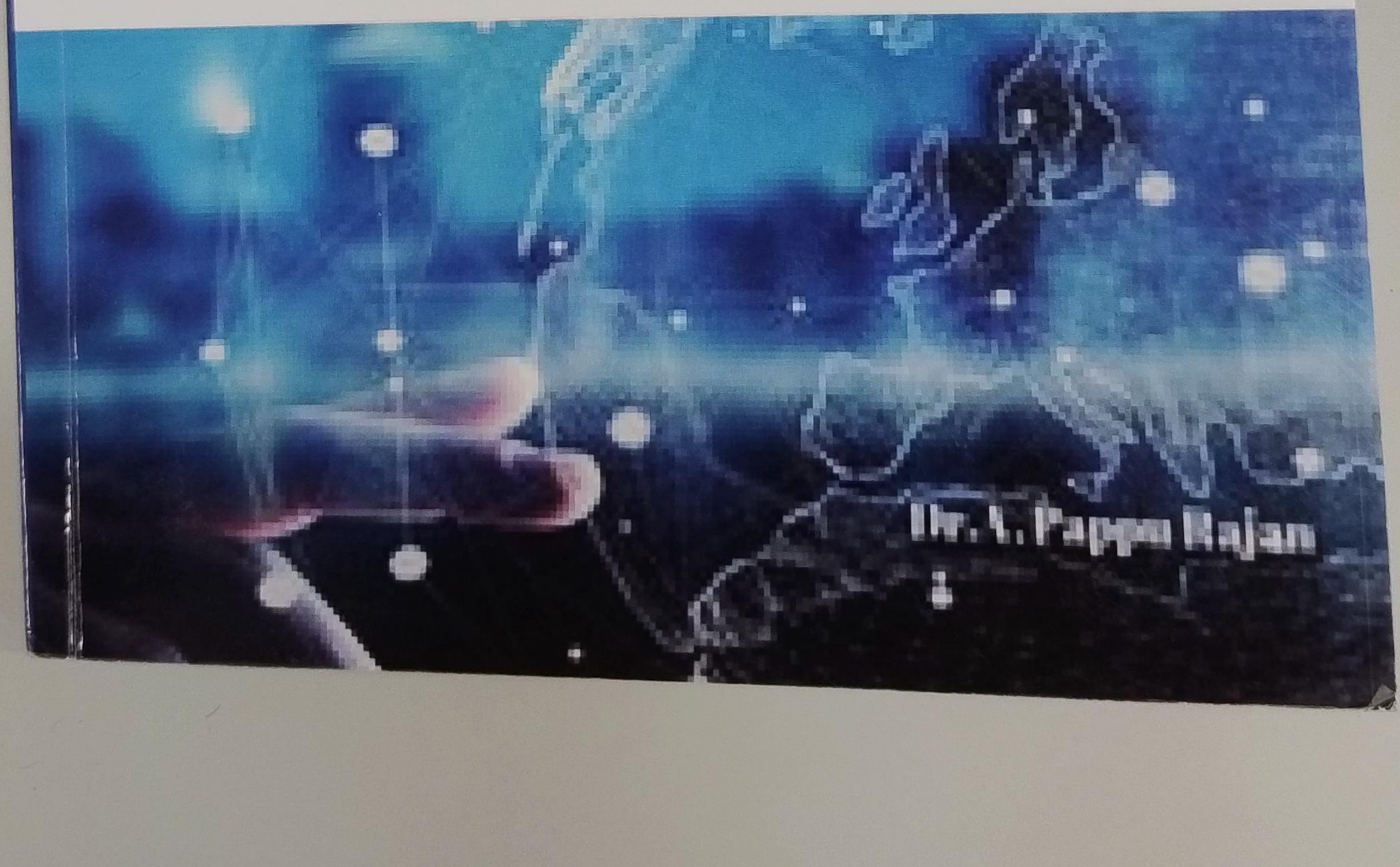

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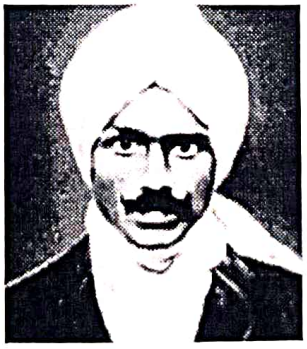

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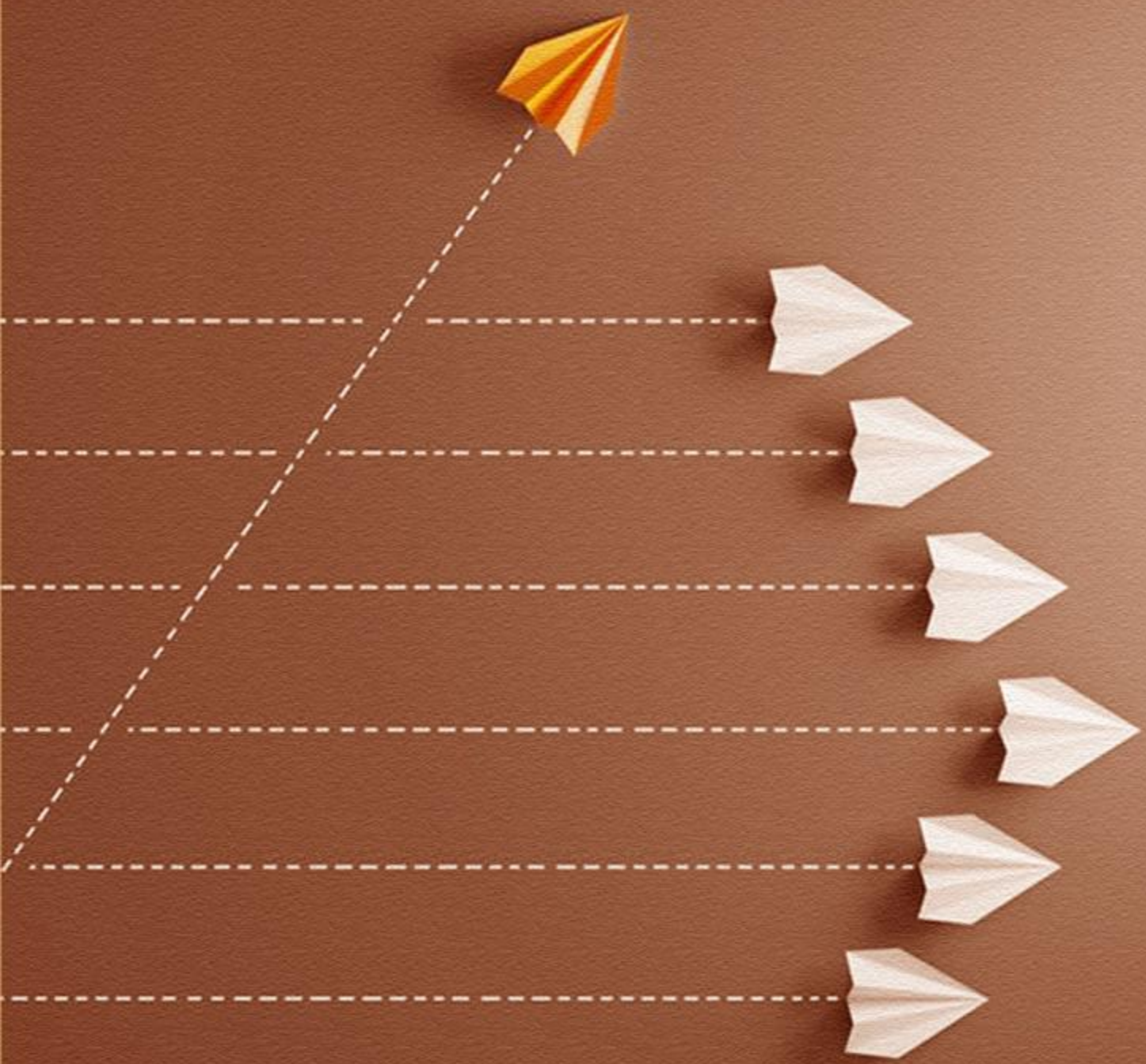

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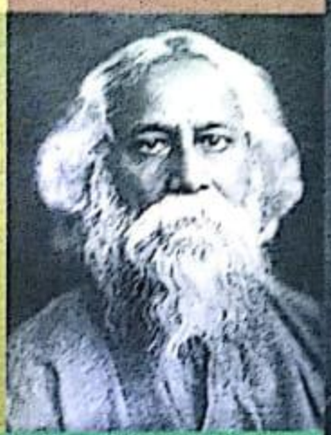

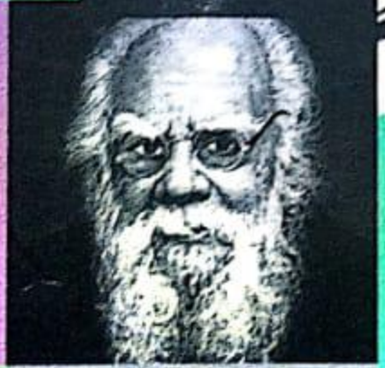

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S. No.	Author	Title of the Book	Month and Year of Publication	ISBN No.	Name & Place of the Publisher	
1.	Dr.A. Asha Monica, Dr.V. Swabna and Dr.A. Edward	The Blueprint of Life-A Road Map to Synthetic Biology	September, 2023	978-93-5762-584-5	Alpha International Publication (AIP), Tiruvarur, Tamilnadu	Yes
2.	Dr. K. Rajan	Eḷiya muṟai cippikkāḷāṉ vaḷarppu toḻilnuṭpaṅkaḷ (Simple Method of Chippi Mushroom Cultivation))	2023	9788194873433	Thra Pathippagam	Yes
3.	Dr. K. R. Martin	Learn yourself Java Practicals	January, 2024	978-3-659-83813-2	Scholars Press, Republic of Moldova	Yes
4.	Dr. K. R. Martin	Agile Methodologies and its Applications	December, 2023	978-81-968294-9-0	Aasan Publications, Virudunagar,Tamilnadu	Yes
5.	Dr. B. Rex Cyril	Deep Learning in Computer Vision	November, 2023	978-81-1931-3570	Aasan Publications, Virudunagar,Tamilnadu	Yes
6.	Dr. J. Antony John Prabu	Big Data Analytics & its Application	February, 2024	978-81-969944-7-1	Leilani Katie Publication & PRESS, Madurai , Tamil Nadu, India	Yes
7.	Dr. A. Jenifer Jothi Mary	Foundations of Data Science	December, 2023	978-93-5577-722-5	Charulatha Publications, Chennai	Yes
8.	Ms. S. Thulasi Bharathi	Big data for Analytics	July, 2023	978-93-95341-79-0	SK Research Group of Companies, Madurai.	Yes
9.	Dr. A. Beatrice Dorothy	Data Science for Beginners	March, 2023	978-81-962595-4-9	Global Aasan Research Publication, Virudhunagar, 626204	Yes
10.	Dr. L. Arockiam Dr. V. Arul Kumar Dr. I. Priya Stella Mary	Python for Beginners (Lecture Notes)	August, 2023			

	Dr. M. Kriushanth Dr. A. Beatrice Dorothy Dr. K. Subash					
11.	Dr. L. Arockiam Dr. V. Arul Kumar Dr. I. Priya Stella Mary Dr. M. Kriushanth Dr. A. Beatrice Dorothy Dr. K. Subash	Python for Intermediates (Lecture Notes)	February, 2024			
12.	Dr. L. Arockiam Dr. K. Subash	IoT (Manual)	February, 2024			Yes
13.	Dr. L. Saral	Business Mathematics and Statistics	March, 2023	978-93-5762-125-0	Alpha International Publication, Thiruvarur, Tamilnadu-614717	
14.	Dr. P. Monisha Devi	Introduction to Capital Markets	November, 2023	978-93-92995-97-2	L Ordine Nuovo Publication, Madurai	Yes
15.	Dr. F.X. Virgin Fraga	Organisational Behaviour	February, 2023	978-93-94958-45-6	Archers and Elevators Publishing house.Bangalore.	Yes
16.	Dr. F.X. Virgin Fraga	Human Resource Management	December, 2023	978-81-96678-0-3	Aasan Publications.Virudhunagar.	Yes
17.	Dr. G. John	Tally Primer	December, 2023	NIL	Joseph Institute of Tally Academy	Yes
18.	Dr. M. Julias Ceasar	Farmers' perception towards agricultural finance	December, 2023	978-81-19337-48-4	Shanlax Publications, Madurai	Yes
19.	Dr. B. Augustine Arockiaraj	The Essentials of Corporate Finance And Trade Finance	November, 2023	978-93-92804-88-5	Bright Sky Publication, Delhi -110085	Yes
20.	Ms. A. Sarlin Venotha	Digital marketing for E-	October,	***978-81-964810-***	Published by Rest	Yes

		Commercehttps://amzn.eu/d/cAZTxef	2023	***6-3***	Publishers Ltd, India.	
21.	Dr. P. Mariappan Dr. S. Manoharan	Forecasting Techniques for SCM	October, 2023	978-620-676-8-487	Lambert Academic Publishing, London	Yes
22.	Dr P. Mariappan	MCQs for UG Mathematics	November, 2023	978-620-6-16429-6	Lambert Academic Publishing, London	Yes
23.	Dr P. Mariappan	Operations Management	October, 2023	978-81-9631-129-2	Cosmas Scientific Publications	Yes
24.	Dr P. Mariappan	Mathematical Foundations of Computer Science	November, 2023	978-939-206-3-312	Scientific International Publishing House	Yes
25.	Dr P. Mariappan	Big Data Analytics	October, 2023	978-93-5757-356-2	Scientific International Publishing House	Yes
26.	Dr. S. Anjali Daisy	EC for Gen Z	December, 2023	979-8892330824	Notion Press	Yes
27.	Dr. A. Pappu Rajan	Web Sentiment Analysis	November, 2023	978-93-5346-807-1	Maps Publishing Solutions	Yes
28.	Dr. V.L. Jayapaul	Begin to Learn English	June, 2023	-	St. Joseph's College (Autonomous), Tiruchirappalli	Yes
29.	Dr. Loyola Innaci	Cloud Computing	January, 2023	978-93-5577-371-5	Charulatha Publications, Chennai	No
30.	Dr. J. Gilbert Mary	An Exploration of Suppression in the Novels of J.M. Coetzee	March, 2023	978-93-93253-76-7	Ryan Publications. Trichy	No
31.	Dr. J. Gilbert Mary	Adversity and Adaptability in the Selected Novels of Maya Angelou	June, 2023	978-93-93253-98-9	Ryan Publications. Trichy	No

32.	Dr. S. Shagilabanu	Tamil Repositary -Part 1 (தமிழ் களஞ்சியம்- பகுதி 1)	October, 2023	--	Tamilsolai Publications	Yes
33.	Dr. S. Shagilabanu	Tamil Repositary – Q&A (தமிழ் களஞ்சியம்- வினா விடை)	October, 2023	--	Tamilsolai Publications	Yes
34.	Dr. J. Saleth	Be proficiency in History (சரித்திர தேர்ச்சி கொள்)	January, 2024	978-93-89384-85-7	Vetrimozhi Publication, Dindigul	Yes
35.	Dr. J. Saleth	Be with scholars (சான்றோர் இனத்திரு)	January, 2024	978-93-89384-82-6	Vetrimozhi Publication, Dindigul	Yes
36.	Dr. A. Sinthiya	Integration of Acetamide Single crystal growth dynamics, Characterization, NLO and Antibacterial properties by oxalic acid through shock wave treatment	2023	978-81-19761-75	B P International	No