TAKE THE LEAP WITH SCALER DATA SCIENCE

An Industry-focussed program that features Business Case Studies & Datasets from Real Companies

SCALER

Upskilling to #CreateImpact

About **Scaler**

Scaler, powered by InterviewBit, is an outcome-focussed leading ed-tech platform for tech professionals. Our industry-vetted approach towards teaching and training young minds helps them upskill and bag the career of their dreams. We are a transformative learning platform devoted towards creating a growth ecosystem to assist software professionals in unlocking their talent and seizing opportunities at every stage of their careers. Learners enroled with us are taught, guided, and mentored by top professionals and experts working at leading organizations including Google, Facebook, Intuit, Microsoft, Amazon, Hotstar, etc. Our learners have witnessed a 5x RoI (Return on Investment) from our program. Our offerings include - Scaler Academy and Scaler Data Science.

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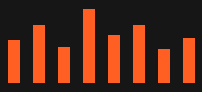


Industry Insights

About **95%** of professionals wish to understand business problems better

80% stumbled as they began working with real-world datasets

The large percentage indicates a clear gap between classroom teachings and industry applications. Enter Scaler.

Scaler Data Science is a program curated to help you kick-start your career in Data Science & Machine Learning. We'll make you industry-ready through a rigorous curriculum taught by industry veterans who'll mentor you as you headway towards growth. With our support, you can #CreateImpact in your career and the Data Science world.

Scaler Data Science is designed after procuring industry insights from 100 Data Science & Machine Learning Engineers who come from top 50 tech companies and startups. You'll gain the needed exposure as you work on 80+ Business Case Studies built in partnership with the top companies. Your skills clubbed with our industry expertise will take your Upskilling game to the next level.

Scaler Program Highlights

Here's what you can expect as you go about upskilling your career with Scaler

Attend a Free Class

Structured, Industry-vetted Curriculum

Live Classes with Industry Veterans

Hyper-Personalised Experience

Regular 1:1 Mentorship

80+ Business Case Studies with Real-world Datasets

20K+ Scaler Learners & Alumni Network

A Dedicated Team of Recruiters

600+ Partner Employers & Placement Assistance

WHERE WILL YOU **FIT IN SCALER DATA SCIENCE?**

Our program ensures that you get to grips with the knowledge and confidence to overcome the most formidable challenges a Data Science or Machine Learning engineer may encounter in their journey from day one.

Entry Points based on your performance in our Coding Entrance Test:

Start from Beginner Module

Recommended for Non-Coders

A 14 month track with a 1 month beginner module.

Start from Intermediate Module

Recommended for 0-2 years of Coding Experience

A 12 month track for those with minimal exposure to Data Science & Analytics.

Start from Core Module

Recommended for 2+ years of Coding Experience

A 10 month Advanced track with Data Science Core.

Know what it's like to upskill at Scaler

Attend a Free Class

ADDING SCALER SPICE TO DATA SCIENCE

As a Data Scientist, you'll be using data to solve real-life business problems. Scaler will build your skill to understand business and industry.

- Assess your conceptual understanding as you work on **80+ Business Case Studies** with datasets from real companies
- Discuss problems in **Live Case Study Discussion** sessions weekly with a Data Scientist
- Gain a fresh perspective from the submission of your peers on a private **Discussion Forum** and understand a different problem-solving approach
- Stay updated about grades, attendance, streak through the **Live Progress Report Card** on your Dashboard
- Stay on the track with **clear deadlines** - failing which will incur a penalty
- Immediate **evaluation** of your assignments to help assess your progress amongst your peers
- Earn **extra credit** for your dedication & effort to cover up for the unanticipated gaps in your performance
- Learn at your pace with the **flexibility** to pause your course anytime you want

CURRICULUM THAT COMPLEMENTS YOUR CAREER

TOPIC	LECTURES	TOTAL DURATION
Beginner Programming	24	8 Weeks (2 Months)
Intermediate Programming	24	8 Weeks (2 Months)
Date Science Common Core	48	16 Weeks (4 Months)
Tools	12	4 Weeks (1 Month)
Libraries	12	4 Weeks (1 Month)
Maths	12	4 Weeks (1 Month)
Fundamentals	12	4 Weeks (1 Month)

SPECIALISATION	LECTURES	TOTAL DURATION
Data Science & Machine Learning with Analytics (Default Track)	60	20 Weeks (5 Months)
Machine Learning - 1	24	8 Weeks (2 Month)
Machine Learning -2	12	4 Weeks (1 Months)
Tools	12	4 Weeks (1 Month)
Data Visualization	12	4 Weeks (1 Month)
***Deep Learning with AI**	57	19 Weeks (4.8 Months)
Maths for Machine Learning	11	
Machine Learning- Supervised	24	
Machine Learning- Unsupervised	12	
Neural Networks	10	

**ELECTIVES	LECTURES	TOTAL DURATION
Computer Vision (or)	12	4 Weeks (1 Month)
Natural Language Processing (or)	12	4 Weeks (1 Month)
ML Ops and Data Engineering (or)	12	4 Weeks (1 Month)
Advanced Programming (or)	48	16 Weeks (4 Months)
Product Analytics (or)	12	4 Weeks (1 Month)

*You can only opt for this track once you qualify the entrance test and demonstrate you are ready to explore the rigorous track

**Choosing at least 1 Elective is mandatory for students going through the Deep Learning specialisation.

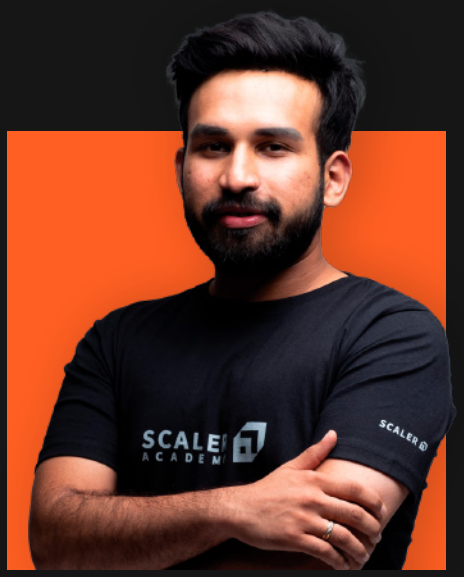
LEARN FROM EXPERTS
WHO'VE BEEN THERE, DONE THAT!

Wear your learner's hat as our Industry Experts walk you through every concept with a fresh perspective. Have a look at our teaching army who'll impart industry wisdom so that you gain real-world exposure.

Mudit Goel

Ex - LinkedIn, INTUIT

At LinkedIn and Intuit, Mudit was granted patents by the US Government. He led the Data Science team at D2L (ranked among the most innovative companies in Data Science). Mudit founded Coding Elements, which was selected by the Govt. of India to teach coding to 2 Million students. He currently leads the Data Science and ML program at Scaler.



Anant Mittal

UNIVERSITY OF MARYLAND | INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY HYDERABAD

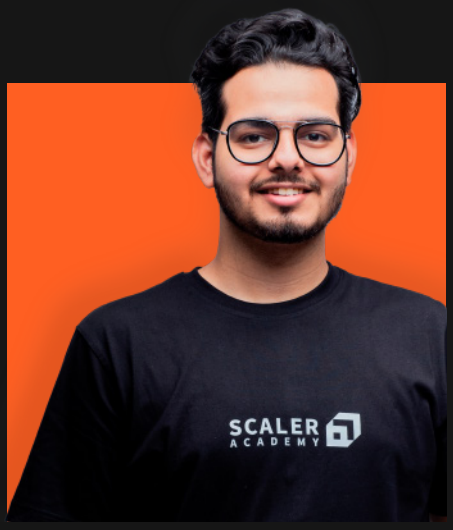
As a researcher at the University of Maryland, he worked on cutting-edge systems to find biomarkers of task activities in the brain. He designed and developed COVID-19 & hygiene-related analytics solutions such as temperature screening and violations related to preventive measures.

MEET YOUR INSTRUCTORS

Srikanth Varma

Ex - Lead Machine Learning Scientist, amazon

Srikanth enjoys teaching and loves solving problems that matter, by building products and services from the ground up. He is a lifelong learner, tinkerer and a team builder, who has worked with Amazon, Yahoo, and co-founded Applied Roots.



Mohit Uniyal

Co-founder, CODING MINUTES, Mentor - Google Code-in, TensorFlow

Mohit is the co-founder of 2 ed-tech startups dedicated to competitive coding preparation. He began his mentoring journey as a Mentor@TensorFlow at Google Code-in. An ex-instructor and Product Engineer at Coding Blocks, he has extensive teaching experience. Currently, he is a Data Scientist at Coding Minutes.

Harshit Tyagi

Ex-Data Engineer, elucidata, Instructor - in Learning

Harshit is a Lead Instructor (Data Science & Machine Learning) at Scaler Data Science. He is the creator of bestselling Data Science & Engineering courses at LinkedIn Learning, OpenClassrooms, Manning, and O'Reilly Media. An ex-Data Engineer at Elucidata, he created biomedical apps for Research Scientists at Yale, UCLA, and MIT.

MEET YOUR INSTRUCTORS

Suraaj Hasija

Ex Sr. Data Scientist , MasterCard

He leads Data Science Business Cases at Scaler Data Science. Working as a Data Scientist 2 at MasterCard, he has transformed industry insights into actionable success for the business. Responsible for building International Market Pricing Strategy, he leads some of the exemplary large-scale Data Science projects within MasterCard.

Prateek Narang

Ex-Software Engineer, Google

An ex-Googler, Prateek is the co-founder of 2 ed-tech startups dedicated to competitive coding preparation. He has completed his MS in Machine Learning from IIT Delhi. Also, he is a popular Udemy Instructor, teaching coding to 75K+ students. Currently, Prateek is an Instructor and the Engineering Lead at Scaler.

Anshuman Singh

Co-Founder, SCALER ACADEMY, Ex - facebook

He is the co-founder of Scaler Academy and a two-time ACM ICPC world finalist. He was one of the founding team members of Facebook Messenger and worked directly with Mark Zuckerberg on product development.

PERSONALISE YOUR EXPERIENCE WITH 1:1 MENTORSHIP

Get clarity on your career path and tackle every stage of your Upskilling journey with regular 1:1 mentorship. Our mentors will help you with your queries, give interview insights, provide placement assistance and make sure you're on the right track.

Sahil Chelaramani
Data Scientist,
Microsoft

He has worked on Bing Search and Azure Global Development teams. He has experience in building large Deep Learning projects and robust Data Science systems.

Girijesh Prasad
Senior Manager, Data Science, Morgan Stanley

He has extensive experience in delivering end-to-end Data Science solutions - from infrastructure to models. He can also share his experience about management and business.

Rajeev Baditha
Data Scientist,
Walmart

He has theoretical as well as hands-on knowledge of Data Science, and has worked at Walmart and Fractal Analytics. He has a Master's degree from Indian Statistical Institute.

Hitesh Hinduja
Senior Manager, Artificial Intelligence, OLA ELECTRIC

He is passionate about cutting-edge research. He also leads a team of 20 to deliver the best electric vehicles, while leveraging end-to-end Machine Learning pipelines.

ADVISORY BOARD:
CORNERSTONE OF SCALER DATA SCIENCE

How exciting it'd be for you to work on business problems that come directly from your dream companies? It'll give you a good analysis of the (Data Science) pitch before you go about hitting a home run in your career.

Our Advisory Committee consists of Data Science professionals who give us a good peek into the industry insights to help us craft about 80 business case studies. Take a look at our industry advisors who help us (and you!) to be better than before.

Pawan Kumar
Head of Data Science, Uber
Ex - LinkedIn

Pawan is an experienced Data Scientist with a strong product sense and an innate ability to communicate complex insights clearly. He has been leading and spearheading the Data Science divisions at Uber and LinkedIn.

He has been empanelled as an advisor for the Scaler Data Science Program.

Ramit Sawhney
Georgia Tech | TOWER RESEARCH CAPITAL

A seasoned software engineer, Ramit is a globally published and recognised researcher at IIIT-Delhi, Georgia Institute of Technology, the AI Institute at University of Southern Carolina, and Open Source Maintainer at AnitaB.org

He has been empanelled as the research advisor for the Scaler Data Science Program.

AMP UP YOUR CAREER

With the right support & career guidance, your Skills can have a real-world impact. We'll push your limits & prepare you to be the player of your (Career) Innings.

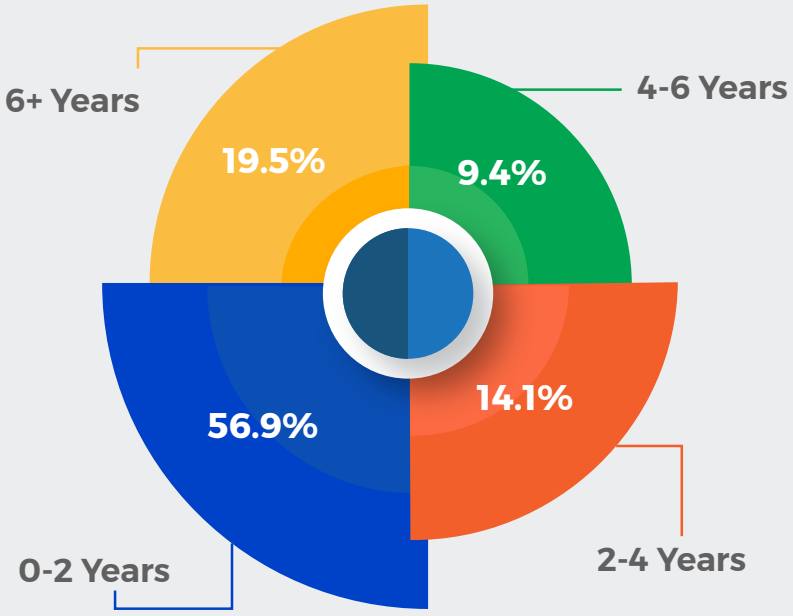
- Access job opportunities from **600+ Partner Employers**
- Optimise your resume, LinkedIn Profile & get the needed **Placement assistance**
- Practice mock **interviews** with Industry Ninjas
- Connect & collaborate with **20K+ Scaler Learners** and **Alumni**

Our Alumni are at reputed Tech Companies & promising Startups

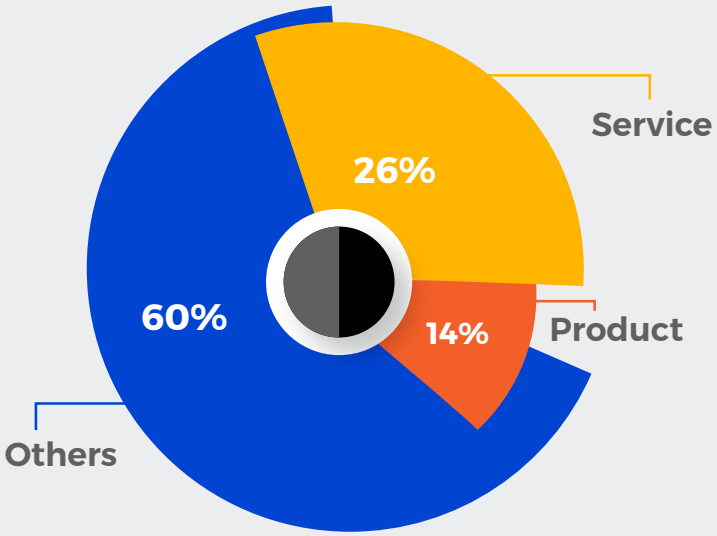
THE ANALYSIS OF OUR BATCH IS OUTSTANDING!

Upskilling with experts is all well & good, but having a stellar batch makes your upskilling journey 10x more challenging & exciting. Meet your potential batchmates & brace yourself for a brighter data-driven career.

Learners' Work Experience

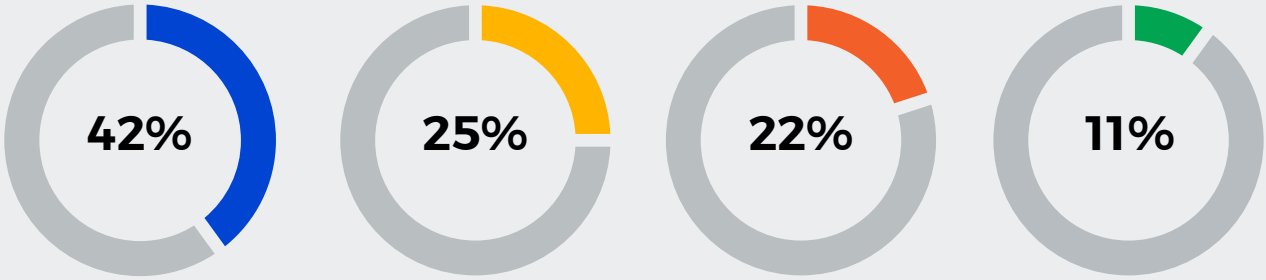


Learners' Industry Background



Learners' Roles & Expertise

- Non-IT and Others
- Data Science
- Tech
- Business Professionals



Eminent Companies & Startups

paytm Adobe ORACLE
Uber AMERICAN EXPRESS amazon
FedEx SWIGGY PHILIPS

Join the versatile community of aspirational working professionals who are all set to #CreateImpact in the real world.

Request a Callback

FEE STRUCTURE

Total Tuition Fee

(Inclusive of GST)

INR 2.99L

Our payment plans include multiple easy financing options that make Scaler accessible to everyone. With our affordable solutions, your investment can be as low as **INR 9,811 per month** - it looks like your monthly grocery bill, doesn't it?

We also offer a 2 weeks trial period and a money-back guarantee if you choose to drop out of the course.

3 Easy Steps to Enrol

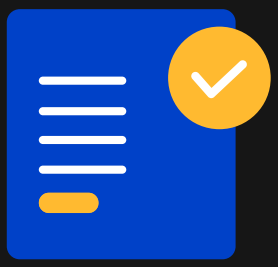
Enrol Now

Easy Registration

Make a new account on www.scaler.com or login using social media / InterviewBit account

Quick Evaluation

Take a simple 30 min MCQ test focused on aptitude and basic coding to find the right course for you



Start Upskilling

Start your learning journey and get set to scale greater professional heights in the Data Science arena

A DEEPER DIVE INTO THE **CURRICULUM**

Note: Listed below is the detailed insight of the Data Science and Machine Learning curriculum with SCALER ADVANTAGE

The Curriculum is crafted to make you a dynamic Data Scientist. We want to prepare you to tackle the toughest challenges a Data Scientist or ML Engineer can face in their journey. It's time you cover-drive the ball (your skills) that it hits the boundary of your dream career!

01 Beginner- Introduction to Python Programming

TOPICS COVERED

Flowcharts, Data Types, Operators, Conditional Statements, Loops, Functions & Recursions, Strings, In-built Data Structures- List, Tuple, Dictionary, Set, Practice

SCALER ADVANTAGE

Gear up for Data Science & Machine Learning interviews by getting your hands-on essential Problem-Solving skills.

02 Intermediate Programming

TOPICS COVERED

Python Refresher, Lambda Functions. List Comprehension, Functional Programming, Decorator, Args, Kwargs, Object Oriented Programming, Exception Handling, Modules, Package, Library, Built-in Modules in Python, Basic DSA & Problem Solving

SCALER ADVANTAGE

This is where you get 100x better than mediocre Data Scientists. Take the leap from a good to a great Data Scientist by learning to solve problems in the simplest & fastest way possible.

03 Common Core- Data Track

A. Python for Data Science & Machine Learning

TOPICS COVERED

Numpy, Pandas, Data Visualisation using Matplotlib & Seaborn, Regular Expression/ Pattern Matching, Git and Github (Recorded Session)

SCALER ADVANTAGE

Prior know-how of Python is not a mandate. We'll cover essential tools like Git. Solve complex business problems using Numpy & Pandas.

B. Probability & Statistics

TOPICS COVERED

Probability Theory & Descriptive Statistics, Probability Distributions
Inferential Statistics

SCALER ADVANTAGE

From Emergency Call Centre to Casino of Las Vegas- Experience Probability & Statistics with a fresh perspective.

C. Maths Refresher for Data Science & Machine Learning

TOPICS COVERED

Coordinate Geometry, Linear Algebra, LP Optimisation basics,
Estimation problems

SCALER ADVANTAGE

Solidify your fundamentals & fall in love with Mathematics as you solve engaging problems - from Drone Delivery to Soccer Matches.

D. Data Acquisition & Unstructured Data

TOPICS COVERED

Databases & SQL, Web API, Scraping, Data Cleaning, Unstructured Data

SCALER ADVANTAGE

Learn how to extract data from various sources (cloud or local) & work with data in different formats (Tables, Files, Images, Audio, Video, Text). Build a crawler to scrape websites & deploy web apps.

E. Applied Data Science

TOPICS COVERED

Hypothesis Testing, Parametric vs non-parametric, Z-test, Chi-square, Skewness, Kurtosis, Normality Test, Experiment Design, ANOVA, Simulations, Power of Test, A/B testing, Diff n Diff, Multi-arm Bandits, EDA, Covariance, Correlation, Pearson, Spearman Rank, Multi-dimensional, Feature Engineering, Column normalisation, Standardisation, Covariance Matrix, Missing Values, Outlier Treatment

SCALER ADVANTAGE

Say Hello to the latest & advanced techniques used by unicorns to conduct experiments & analyse data.

F. Data Visualisation with Tableau

TOPICS COVERED

Managing Data Sources & Visualisations, Analysing Data using Statistical Tools, Creating Basic Charts, Dashboards, & Action

SCALER ADVANTAGE

Get the hang of the predominant industry tool, Tableau, for visualising, dashboarding & reporting to ace your role as a Data Analyst, Data Scientist or Machine Learning Engineer.

G. Product, Strategy, Business

TOPICS COVERED

Metric Design, Decode Product & Strategy Rounds

SCALER ADVANTAGE

Outshine your Problem-Solving skills as you learn to break down business situations, design correct metrics & deal with uncertainty.

04 Data Science & Analytics

A. Tools for Data Analysts

TOPICS COVERED

Advanced SQL, Google Spreadsheets, Introduction to Excel and Formulas, Tables, Charts, and Statistical Functions. Advanced Tableau, Mapping Geographic Data, Using stories to build dashboards, Working with Times and Dates, Creating Conditional Calculations Using Logical Functions, Creating Level of Detail (LOD) Expressions, Summarising Data Using Table Calculations, Managing Text Strings

SCALER ADVANTAGE

From Excel to Advanced Tableau and SQL, master everything that is industry-relevant.

B. Machine Learning

TOPICS COVERED

Supervised Learning, Linear Regression, Gradient Descent, Multicollinearity, VIF, R-square, Heteroscedasticity, Sklearn, Polynomial Regression, Bias-Variance trade-off, Regularisation, Logistic Regression, Squashing function, AUC, ROC, Precision-Recall Curve, Confusion matrix, Specificity, KNN, Decision Trees, Ensemble learning, Bagging, Boosting, SHAP Values, Support Vector Machine, Bayesian Machine Learning

SCALER ADVANTAGE

Work on projects that require Computer Vision or Natural Language Processing.

C. Unsupervised Learning

TOPICS COVERED

KMeans, Customer Segmentation, Hierarchical, DBSCAN, Anomaly Detection, Local Outlier Factor, Isolation Forest, Dimensionality Reduction, PCA, t-SNE

SCALER ADVANTAGE

Practice critical segments from Anomaly Detection to Dimensionality Reduction, and overcome pre-interview jitters.

D. Recommender Systems

TOPICS COVERED

Collaborative/Content filtering, Propensity analysis, Cold start problem
Market Basket Analysis/Data Mining/Association Mining

SCALER ADVANTAGE

From Content Filtering to Data Mining, learn to incorporate all their principles and solve complex real-world problems.

E. Predictive Modelling & Time Series Forecasting

TOPICS COVERED

EDA, Resampling, Autocorrelation, Forecasting, Seasonal Naive, Double/Triple Exponential (Holt) Residual Analysis, Stationarity tests, Autoregressive methods, moving average, ARIMA, SARIMA.

SCALER ADVANTAGE

Ace critical topics centric to Business or Product related problems and get interview-ready.

05 Data Science and Machine Learning- Specialisation

A. Essential Maths for Machine Learning

TOPICS COVERED

Linear Algebra - Vector and Matrices, Dot product, Projections, System of Equations, Matrix Transformation, Eigen Vectors and Values, Orthonormal Basis Vectors, SVD, PCA,
Coordinate Geometry - Line, Plane, HyperPlane, Half space, Classification using plane,
Calculus - Functions, Limits, Derivatives, Partial derivatives, Saddle points

SCALER ADVANTAGE

Work on projects built in partnership with top companies. Get your hands dirty by working with messy and unclean real-world data.

B. Supervised Learning

TOPICS COVERED

Linear Regression, Gradient Descent, Multicollinearity, VIF, R-square, Heteroscedasticity, Sklearn, Polynomial Regression, Bias-Variance trade-off, Regularisation, Logistic Regression, Squashing function, AUC, ROC, Precision-Recall Curve, Confusion matrix, Specificity, KNN, Decision Trees, Ensemble learning, Bagging, Boosting, SHAP Values, Support Vector Machine, Bayesian Machine Learning

SCALER ADVANTAGE

From understanding the inner workings of your favourite apps to coding them from scratch, we'll teach you all.

C. Unsupervised Learning

TOPICS COVERED

KMeans, Customer Segmentation, Hierarchical, DBSCAN, Anomaly Detection, Local Outlier Factor, Isolation Forest, Dimensionality Reduction, PCA, t-SNE, GMM, Information Theory, Expectation Maximisation

SCALER ADVANTAGE

Detect fraud, understand complex datasets & optimise sale campaigns by acing the popular algorithms used by companies.

D. Recommender Systems

TOPICS COVERED

Collaborative/Content filtering, Propensity analysis, Cold start problem

SCALER ADVANTAGE

Learn the science behind these notifications; LinkedIn: Jobs you may be interested in, Netflix: You might also like House of Cards, Amazon: People who bought that also bought this.

E. Predictive Modelling & Time Series Forecasting

TOPICS COVERED

EDA, Resampling, Autocorrelation, Forecasting, Seasonal Naive, Double/Triple Exponential (Holt) Residual Analysis, Stationarity tests, Autoregressive methods, moving average, ARIMA, SARIMA.

SCALER ADVANTAGE

Be it forecasting the exact number of orders to be placed at a restaurant on New Year's Eve or forecasting the number of oxygen cylinders a hospital will require. Scaler will ensure you get a hold of both the situations like a Pro!

F. Deep Learning

TOPICS COVERED

Neural Networks - MLP, Backpropagation, Hyperparameter Tuning, Practical Aspects of DL, Keras, Tensorflow, Pytorch

SCALER ADVANTAGE

Acquire the in-demand skill of Reading & Writing a relevant research paper. Understand the underlying Maths & or write Neural networks from scratch.

06 *Electives

A. Computer Vision

TOPICS COVERED

Convolutional Neural Nets, Data Augmentation, Transfer Learning, CNN Visualisation, Popular CNN Architecture - Alex, VGG, ResNet, Inception, DenseNet, EfficientNet, MobileNet, Object detection & Segmentation, GANs

SCALER ADVANTAGE

Dive into the inner workings of the latest models and techniques that enable a machine to "see". Work on projects related to e-commerce, video surveillance, and art museums.

B. Natural Language Processing

TOPICS COVERED

Text Processing and representation - Tokenization, Stemming, Lemmatization, Vector space modelling, Cosine Similarity, Euclidean Distance, POS tagging, Dependency parsing, Topic Modeling, Language Modeling Embeddings, Recurrent Neural Nets, Information Extraction, Entity Recognition, Transformers, HuggingFace, BERT, Building Chatbots

SCALER ADVANTAGE

From Grammarly's responsive working to Google Translate's quick performance even for the lesser known languages there is a lot more to learn here, beyond just Chatbots.

C. Reinforcement Learning and Forecasting

TOPICS COVERED

Reinforcement Learning, Q-learning, Autonomous players, RNNs and LSTMs for forecasting.

SCALER ADVANTAGE

Remember learning to ride a bicycle? Paddling through trembling feet to a firm balance, you used a technique. We'll apply the same technique to teach a computer anything you want it to do!

D. Machine Learning Ops

TOPICS COVERED

Project scoping, Experiment tracking using MLFlow/W&B, Scripting (Flask/FastAPI/Streamlit), Testing, Versioning, Docker, CI/CD pipelines, AWS lambda, Model Monitoring, Drift

SCALER ADVANTAGE

Don't stop at just building the models, learn to develop end-to-end ML pipelines. Build applications powered by your Machine Learning models. Work with the latest Cloud Platforms to deploy these apps and monitor your models

E. Product Cases & Analytics

TOPICS COVERED

Framework to address product sense questions, Diagnostics, Metrics, KPI, Product Design & Development, and Product Cases (Walmart, Google, Facebook, Amazon etc)

SCALER ADVANTAGE

Learn how to break down critical business situations, design the correct metrics, and deal with uncertainty. We'll help you stand out from the crowd and deliver impact, with ease.

*These are Elective Subjects, you can either opt to study one or all of them.

Need more insights?
Speak with our Career Counsellor
for a detailed overview of
Scaler Data Science.

Schedule A Call

SCALER
WWW.SCALER.COM

#CreateImpact