

Data Analytics, Big Data & Data Science:

Increasing Confidence in Business Decisions
In an Uncertain Digital Economy

**A Holistic Approach
to Optimize Your
Workforce**

[Learn More ►](#)

**Comprehensive
Data Science
Learning Paths**

[Learn More ►](#)

**Power BI —
Unlocking the Value
of Your Data**

[Learn More ►](#)

Top 3 Data Science Pain Points

What can you do to transform data frustrations into clarity and peace of mind?



Hiring

Identifying the right job roles and hiring the right team is essential to the success of your data science team.



Stakeholder Collaboration

Data science success requires a culture shift — not just a technology shift. Stakeholder buy-in, as well as understanding of their needs, is critical.



Domain Knowledge

Understanding your organization's data environment better informs limitations and improves predictive accuracy.

Learning Tree's Data Science Training The Tools & Techniques to Make Better Business Decisions

Our data science training curriculum will teach your team how to create data-driven business strategies, and store, manage, process, and analyze large data sets.

Gain data science skills in:

- » Artificial Intelligence
- » Deep Learning
- » Machine Learning
- » Power BI
- » Azure
- » Big Data
- » Statistics
- » IoT
- » Python
- » Tableau
- » Data Wrangling
- ... and more!



NEW!

Data Science Training Bundles

Take your data science skills — and career — to the next level with multi-modal learning path bundles.



Bundle Training Benefits:

- Extends learning beyond a single event with bundled content designed for continued real-world application!
- Exam Vouchers Included!
- 100% Virtual Attendance Available, plus Class Recordings via AnyWare®
- Expert Instructor Guidance & After-Course Coaching Included
- Trial Membership to our NEW Data Science Social Collaboration Space with exclusive Subject Matter Expert access!

Choose from These Popular Topics:

Data Science

Intro to Big Data
Data Science, Machine Learning & AI w/Python
Certified Python Programming Professional
Certified Python Data Science Developer
Certified Machine Learning Professional
Certified Deep Learning Professional
Specialist in Tableau for Data Science

[Learn More ▶](#)

Azure

Azure Data Scientist
Azure AI Engineer
Azure Data Engineer
Azure Solutions Architect

[Learn More ▶](#)

Power Platform

Analyzing Data with Power BI
Power Platform Specialist

[Learn More ▶](#)

Learn More & Purchase at:
www.LearningTree.ca/DSBundles

Defining the Pieces of the Data Puzzle

Explore the 6 Major Skills Areas that Make Up Data Science

DATA ANALYTICS

is the most common use of data, involving extracting data from relational databases (e.g., SQL Server, Oracle) and presenting findings as reports and corporate dashboards.

SKILLS NEEDED

- Manipulate databases using SQL
- Use dashboard tools and design effective dashboards
- Utilize statistical tools to maintain data integrity
- Produce effective, clear charts that inform, rather than confuse, decision makers

BIG DATA

describes working with data that is too large to be processed using standard (e.g., workstation, single server) tools. Popular platforms include Hadoop, Spark, and Tableau.

SKILLS NEEDED

- Operate and manage clusters of networked computers
- Maintain high availability of the cluster
- Understand how cyber security issues can affect big data
- Programming using enterprise languages, such as Java and Scala

MACHINE LEARNING (ML)

involves training computers, through repeated presentation of observations and outcomes, to make predictions that are not obvious to a person.

SKILLS NEEDED

- Expertise modeling techniques/tools
- Understanding the statistical basis of algorithms
- Programming (Python or other ML language)
- Work closely with data scientists to ensure machine learning technology delivers results for the organization

AI has been around since the 1950s, but today's AI researchers use cutting-edge tech like deep learning (aka, neural networks), Natural Language Processing (NLP), and image processing (used in self-driving cars).

SKILLS NEEDED

- Highly specialized by area of research and niche expertise
- Programming and writing code for machines
- Designing and developing machines and systems that can learn and apply knowledge without specific direction.
- Research, analytical, organizational, and critical thinking skills

DATA VISUALIZATION

involves representing information visually (e.g., charts, tables, diagrams, illustrations) in order to bring data to life in a way that's easy to understand to drive better business decisions.

SKILLS NEEDED

- Expertise modeling techniques/tools
- Understanding the statistical basis of algorithms
- Programming (Python or other ML language)
- Work closely with data

scientists to ensure machine learning technology delivers results for the organization



MACHINE LEARNING



ARTIFICIAL INTELLIGENCE (AI)

Defining the Pieces of the Data Puzzle



DATA ANALYTICS



BIG DATA



DATA VISUALIZATION

DECISION ANALYSIS



DECISION ANALYSIS

is the process of applying a standardized and tested methodology for decision-making which helps organization make decisions more easily and transparently.

SKILLS NEEDED

- Formalize the decision-making process
- Frame decisions, think creatively, analyze, and implement informed and justifiable decisions
- Understand uncertainty with data
- Use multi-criteria alternatives
- Leverage skills/tools like emotional intelligence, management techniques, decision trees, diagrams, and more

Learning Tree's Comprehensive Data Science Learning Paths

Course #	HR Administrator/L&D Specialist	Level
3656	Preparing for a Digital Transformation Initiative	Foundation
Course #	Business Analyst/Business Architect	Level
1255	Introduction to Decision Analysis	Foundation
1256	Tableau Visual Analytics Training	Foundation
8650	Power BI: Developer in a Day	Advanced
1264	Introduction to Data Science, Machine Learning & AI using Python Training	Foundation
1274	Data Visualization with Python Training	Intermediate
1257	Advanced Tableau Training	Advanced
1255	Introduction to Decision Analysis	Foundation
1256	Tableau Visual Analytics Training	Foundation
8649	Power BI: Advanced Data Modeling and Shaping	Foundation
8651	Hands-On Paginated Reports with Power BI	Advanced
1264	Introduction to Data Science, Machine Learning & AI using Python Training	Foundation
1274	Data Visualization with Python Training	Intermediate
Course #	Machine Learning Engineer/Enterprise Architect/Machine Learning Researcher	Level
1263	Applied Data Science with Python and Jupyter	Foundation
1270	Modern Deep Learning Techniques using TensorFlow	Foundation
1255	Introduction to Decision Analysis	Foundation
1264	Introduction to Data Science, Machine Learning & AI using Python Training	Foundation
1265	Fundamentals of Statistics for Data Science	Foundation
1278	Leveraging Deep Learning for Natural Language Processing Course	Intermediate
1277	Applied Deep Learning with PyTorch	Intermediate
Course #	Data Wrangler/Data Science Programmer	Level
1905	Introduction to Python Training	Foundation
1273	Python Data Wrangling	Foundation
925	Introduction to SQL Course	Foundation
1264	Introduction to Data Science, Machine Learning & AI using Python Training	Foundation
1263	Applied Data Science with Python and Jupyter	Foundation
1270	Modern Deep Learning Techniques using TensorFlow	Foundation
1277	Applied Deep Learning with PyTorch	Intermediate
1906	Advanced Python: Best Practices and Design Patterns	Advanced

TO LEARN MORE, VISIT [LEARNINGTREE.CA/DATASCIENCE](https://learningtree.ca/datascience)
OR CALL **1-800-843-8733**

Learning Tree's Comprehensive Data Science Learning Paths

Course #	Data Engineer/Data Architect/Data Designer/Big Data Developer/IoT Engineer Developer	Level
1273	Python Data Wrangling	Foundation
1263	Applied Data Science with Python and Jupyter	Foundation
1250	Introduction to Big Data Training	Foundation
1279	Azure Synapse Analytics	Intermediate
1261	Building Enterprise Solutions with MongoDB Training	Intermediate
Course #	Framework/Database Administrator	Level
1250	Introduction to Big Data Training	Foundation
1261	Building Enterprise Solutions with MongoDB (Team Training Only)	Intermediate
1279	Azure Synapse Analytics	Intermediate
Course #	Quantitative Researcher/Data Visualization Designer	Level
1255	Introduction to Decision Analysis	Foundation
1256	Tableau Visual Analytics Training	Foundation
1265	Fundamentals of Statistics for Data Science	Foundation
1264	Introduction to Data Science, Machine Learning & AI using Python Training	Foundation
1263	Applied Data Science with Python and Jupyter	Foundation
1270	Modern Deep Learning Techniques using TensorFlow	Foundation
8649	Power BI: Dashboard Training	Foundation
1278	Leveraging Deep Learning for Natural Language Processing Course	Intermediate
1257	Advanced Tableau Training	Advanced
8645	Power BI: Administrator in a Day	Advanced
8646	Power BI: Advanced Data Modeling and Shaping	Advanced
8648	Advanced Visualization with Power BI	Advanced
8650	Power BI: Developer in a Day	Advanced
8651	Hands-On Paginated Reports with Power BI	Advanced
1277	Applied Deep Learning with PyTorch	Intermediate
Course #	Data Scientist	Level
1264	Introduction to Data Science, Machine Learning & AI using Python Training	Foundation
1905	Introduction to Python Training	Foundation
1265	Fundamentals of Statistics for Data Science	Foundation
1277	Applied Deep Learning with PyTorch	Intermediate
1278	Leveraging Deep Learning for Natural Language Processing Course	Intermediate

TO LEARN MORE, VISIT [LEARNINGTREE.CA/DATASCIENCE](https://learningtree.ca/datascience)
OR CALL **1-800-843-8733**

Learning Tree's Data Science & Analytics experts have designed role-specific learning paths that provide you with the knowledge and skills to implement, manage, and enhance your organization's big data strategy. **Click to view as Interactive Learning Paths >**

Course #	Data Analyst	Level
1264	Introduction to Data Science, Machine Learning & AI using Python Training	Foundation
1273	Python Data Wrangling	Foundation
1263	Applied Data Science with Python and Jupyter	Foundation
4509	Introduction to Python for Data Analytics	Foundation
1274	Data Visualization with Python Training	Intermediate
195	Excel Data Analysis Training	Intermediate
Course #	Cloud Specialist	Level
1274	Data Visualization with Python Training	Intermediate
195	Excel Data Analysis Training	Intermediate
Course #	Management Team	Level
1255	Introduction to Decision Analysis	Foundation
3656	Preparing for a Digital Transformation Initiative	Foundation



On-Demand Webinars

Data Wrangling with Python

In this on-demand webinar, Learning Tree Data Science Curriculum Dean Chris Mawata explores why Python is the most popular language for revolutionizing data operations with high-level programming, data visualization, machine learning algorithms, and more.

[Watch Now ▶](#)



Chris Mawata, Ph.D.,

Learning Tree Data Science Curriculum Dean

Chris has over 35 years of IT experience including 17 years of teaching at the university level and 20 years of training Java, Big Data, and AI. As a Learning Tree instructor, Chris has authored six courses. As a consultant he runs a 20-node cluster on which he has several Big Data frameworks installed. He has published peer-reviewed papers in image processing, artificial intelligence, and pure mathematics.

End-to-End Machine Learning Lifecycle Workflows on Azure

From pre-processing to learning to deployment - machine learning goes through many phases. In this course, you will learn how developers and data scientists at all skill levels can use Azure Machine Learning for MLOps, Interoperability and Responsible ML in their projects.

[Watch Now ▶](#)



John Younie

Featured Learning Tree Data Science Instructor

John is a Military Veteran with over 22 Years of Service. Prior to becoming a dedicated IT Geek, John was an Aircraft Engineer in The Royal Air Force working on multiple aircraft types including the Phantom F4J, Tornado GR1, and GR4 fast jets and the Chinook helicopter. It was the move from Aircraft Engineer to Data Engineer and working on Aircraft Data and Databases that enabled John to focus on all things IT, including Programming (FORTRAN, C++, VB), Database Design and Data Wrangling.

High-Performance Training & Implementation Solutions From Learning Tree

Technology Brands

Adobe	IBM	Oracle	SAP
AWS	Lean Six Sigma	Red Hat	VMware
Cisco	Microsoft	Salesforce	

IT & Management Training Topics

Agile & Scrum	Data Science & Big Data	Linux & UNIX	Power BI
Apple Programming	DevOps	Microsoft Dynamics 365	Project Management
Azure	FAC-P/PM	Microsoft Office	Python
Business Analysis	ITIL®	Microsoft Windows Server and Windows 10	SharePoint
Business Intelligence	ITSM	Mobile App Development	Software Development
Cloud Computing	Java	.NET / Visual Studio	SQL Server
Communication Skills	Leadership & Professional Development	Networking	Web Development & Design
Cyber Security			

Honored In Serving 60,000+ Organizations

For 45 years, Learning Tree has been a trusted partner for the world's largest corporations in Financial Services, Healthcare, all levels of Government, Professional Services, Manufacturing, Education and Non-Profits.

500+ Expert Instructors – Real-World Practitioners

Serving our global footprint and averaging 15+ years of real-world consulting experience to deliver real-world results

Demonstrated Past Performance

Offering end-to-end capabilities resulting in improved organizational performance – Workforce Development



LearningTree.ca | 1-800-THE-TREE (843-8733)