

# A Report on Workshop on: Python for Data Science

Workshop Topic	Workshop on Python for Data Science				
Date	13th May - 19th May				
Time	9.00am to 5.00pm				
Venue	Skill Lab				
Resource Persons	S. Ravikumar				
	[M.S Software System]				
Inaugurated by	Dr. Narendra Viswanath				
	Principal, Shridevi Institute of Engineering and Technology, Tumkur				
Organizing Chairman	Dr. Basavesha D				
	Head & Professor, Dept of CSE, SIET, Tumkur				
Mentors	Dr. Udayakumar N.L, Dr. Bhargav H K				
Target Audience	2th Sem CSE 'B' Sec Students				
	The primary objectives of the workshop were:				
	- To introduce students to the real-world demands and expectations in the				
	field of Data Science.				
	- To provide hands-on experience with essential Python modules used in				
Objective	Data Science.				
	- To help students understand their learning paths and career opportunities				
	in Data Science.				
	- To mainstream essential information and best practices in Data Science				
	using Python.				
	The workshop on Python for Data Science was organized and conducted by				
	the CSE dept. This Workshop was conducted for 6 days from Monday to				
	Saturday. The students from the CSE dept showed a huge interest in this				
	workshop. All the students gathered in the Skill lab and COE lab by 9:00				
	am to 5.00pm on Every day of workshop. On the first day brief idea was				
	given to the students about the fundamentals of Python for Data Science				
	was taught to the students and various doubts were solved. Also an idea				
	about Bootstrap was given to the students. The next day onwards this				
Details of the Activity	Workshop Content:- followed				
·	The workshop covered various topics and modules essential for budding				
	data scientists:				
	1. NumPy:				
	- Use: NumPy is a powerful library for numerical computing in Python. It				
	provides support for arrays, matrices, and many mathematical functions to				
	operate on these data structures.				
	- Applications: NumPy is widely used for numerical calculations, statistical				
	analysis, and handling large datasets efficiently.				
	2. Matplotlib:				

	- Use: Matplotlib is a plotting library used for creating static, interactive,
	and animated visualizations in Python.
	- Applications: It is used to generate graphs and plots to visualize data
	trends, distributions, and patterns.
	tiends, distributions, and patterns.
	3. Pandas:
	- Use: Pandas is an essential data manipulation and analysis library in
	Python. It provides data structures like Data Frame, which are ideal for
	handling structured data.
	- Applications: Pandas is used for data cleaning, transformation, analysis,
	and visualization, making it a cornerstone for any data science project.
	Workshop Highlights:-
	- Interactive Sessions: The workshop included interactive sessions where
	students engaged in coding exercises, group discussions, and hands-on
	projects.
	- Expert Guidance: Industry experts and experienced faculty members
	guided the students through the complexities of Data Science and Python
	programming.
	- Real-World Examples: The sessions were enriched with real-world
	examples and case studies, helping students understand the practical
	applications of their learning.
	Conclusion:-
	The workshop was a significant step towards equipping second-semester
	engineering students with essential skills in Python for Data Science. Such
	workshops are crucial in bridging the gap between academic learning and
	industry requirements. They provide students with a head start in
	understanding the demands of the field, identifying their learning paths, and
	preparing for future careers in technology and analytics.
	Future Prospects and Improvement Scopes:
	- Continued Learning: Encouraging students to further explore and
	specialize in Data Science and Python.
	- Advanced Workshops: Organizing advanced workshops and certification
	programs to deepen students' knowledge and skills.
	- Industry Collaboration: Strengthening collaborations with industry experts
	for real-world insights and internships.
	- Feedback Mechanism: Implementing a feedback mechanism to
	continuously improve the content and delivery of such workshops.
	This workshop has laid a strong foundation for the students of CSE,
	preparing them for the exciting and challenging world of Data Science.
	Python for Data Science is the fundamental process for starting with any of
	the projects. Also it is beneficial for the students as now they will be able to
Outcome	make their own Project successfully.
	Project Exhibition On Python for Data Science based on this workshop was
	also conducted by CSE dept.

#### **Prize Winners:**

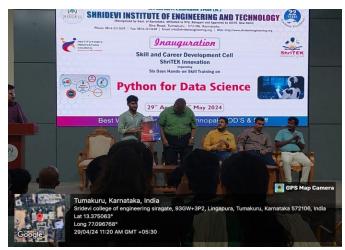
Project Title	Team Members		Prize
Smart Mirror	1. Shivani.T.C 2. Monika.H.C 3. Sindhu.V.H 4. Usha.A.M	5. Namitha.G 6. Soujanya 7. Sushmitha.C.I 8. Navya Shree	2-sem B 1 <sup>st</sup> prize
Flymeds	<ol> <li>Omkar.S,S</li> <li>RakshithaY.V</li> <li>Syed ayan</li> <li>Padmashree</li> </ol>	5. Ruchith 6. SiriR.S 7. Sadhana 8. Varshini	2-sem B 2 <sup>nd</sup> prize

### BROCHRE



Dr. Rajeswari R Co-Ordinator Dr. Basavesha D HOD, CSE













# A Report on Workshop on: Python for Data Science

Workshop Topic	Workshop on Python for Data Science				
Date	29th April 2024 - 04th May 2024				
Time	9.00am to 5.00pm				
Venue	CNR Lab				
Resource Persons	Praveen N Hongal Founder of Mitras IT Solutions				
Inaugurated by	Dr. Narendra Viswanath Principal, Shridevi Institute of Engineering and Technology, Tumkur				
Organizing Chairman	Dr. Basavesha D Head & Professor, Dept of CSE, SIET, Tumkur				
Mentors	Dr. Kiran G M, Dr. Rajeswari R				
Target Audience	2th Sem CSE "A" Sec Students				
Objective	<ul> <li>The primary objectives of the workshop were:</li> <li>To introduce students to the real-world demands and expectations in the field of Data Science.</li> <li>To provide hands-on experience with essential Python modules used in Data Science.</li> <li>To help students understand their learning paths and career opportunities in Data Science.</li> <li>To mainstream essential information and best practices in Data Science using Python.</li> </ul>				
Details of the Activity	The workshop on Python for Data Science was organized and conducted by the CSE dept. This Workshop was conducted for 6 days from Monday to Saturday. The students from the CSE dept showed a huge interest in this workshop. All the students gathered in the Skill lab and COE lab by 9:00 am to 5.00pm on Every day of workshop. On the first day brief idea was given to the students about the fundamentals of Python for Data Science was taught to the students and various doubts were solved. Also an idea about Bootstrap was given to the students. The next day onwards this Workshop Content:- followed The workshop covered various topics and modules essential for budding data scientists: 1. NumPy: - Use: NumPy is a powerful library for numerical computing in Python. It provides support for arrays, matrices, and many mathematical functions to operate on these data structures. - Applications: NumPy is widely used for numerical calculations, statistical analysis, and handling large datasets efficiently. 2. Matplotlib:				

	- Use: Matplotlib is a plotting library used for creating static, interactive,
	and animated visualizations in Python.
	- Applications: It is used to generate graphs and plots to visualize data
	trends, distributions, and patterns.
	tiends, distributions, and patterns.
	3. Pandas:
	- Use: Pandas is an essential data manipulation and analysis library in
	Python. It provides data structures like Data Frame, which are ideal for
	handling structured data.
	- Applications: Pandas is used for data cleaning, transformation, analysis,
	and visualization, making it a cornerstone for any data science project.
	Workshop Highlights:-
	- Interactive Sessions: The workshop included interactive sessions where
	students engaged in coding exercises, group discussions, and hands-on
	projects.
	- Expert Guidance: Industry experts and experienced faculty members
	guided the students through the complexities of Data Science and Python
	programming.
	- Real-World Examples: The sessions were enriched with real-world
	examples and case studies, helping students understand the practical
	applications of their learning.
	Conclusion:-
	The workshop was a significant step towards equipping second-semester
	engineering students with essential skills in Python for Data Science. Such
	workshops are crucial in bridging the gap between academic learning and
	industry requirements. They provide students with a head start in
	understanding the demands of the field, identifying their learning paths, and
	preparing for future careers in technology and analytics.
	Future Prospects and Improvement Scopes:
	- Continued Learning: Encouraging students to further explore and
	specialize in Data Science and Python.
	- Advanced Workshops: Organizing advanced workshops and certification
	programs to deepen students' knowledge and skills.
	- Industry Collaboration: Strengthening collaborations with industry experts
	for real-world insights and internships.
	- Feedback Mechanism: Implementing a feedback mechanism to
	continuously improve the content and delivery of such workshops.
	This workshop has laid a strong foundation for the students of CSE,
	preparing them for the exciting and challenging world of Data Science.
	Python for Data Science is the fundamental process for starting with any of
	the projects. Also it is beneficial for the students as now they will be able to
Outcome	make their own Project successfully.
	Project Exhibition On Python for Data Science based on this workshop was
	also conducted by CSE dept.

#### **Prize Winners:**

Project Title	Team Members		Prize
Fake News Detection	<ol> <li>KARTIK B KENCHI</li> <li>KAVYASHREE M</li> </ol>	4. LAXUMAN 5. MEGHANA H M	2-sem A 1 <sup>st</sup> prize
Tie-Tac-Toe Gmaes	<ol> <li>KUSHALA S</li> <li>MADHAV U</li> <li>ADITYA PATIL</li> <li>RAKUM</li> <li>VARSHITHA M G</li> <li>ANANYA K E</li> </ol>	6. PALLAVI A R	2-sem A 2 <sup>nd</sup> prize

### BROCHURE



Dr. Rajeswari R Co-Ordinator Dr. Basavesha D HOD, CSE

