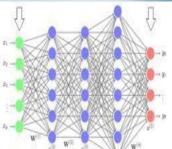
IIT Kanpur Advanced Career School in PYTHON-Based Data Science, Machine Learning and Deep Learning 22nd January to 25th February, 2022

Organized by Prof. Aditya K. Jagannatham, EE Department, IIT Kanpur

PYTHON-Based Data Science, Machine Learning and Deep Learning









Important Dates

School Dates

22nd Jan to 25th Feb, 2022

Last Date for Registration

14th January, 2022

Venue

To be conducted online via Zoom

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Welcome to the <u>IIT Kanpur Advanced Career School</u> on PYTHON for *Data Science, Machine Learning and Deep Learning!* This school, spanning over 5 weeks, is an intensive program for scholars, students, faculty members, industry professionals and R&D staff aspiring to get an in-depth exposure and learn hands-on implementation of the cutting edge algorithms and software for Data Science (DS), Machine Learning (ML) and Deep Learning (DL) toward *projects, research, placements* and career advancement. The school will include extensive coverage of PYTHON programming, and numerous important packages such as *NUMPY, LINALG, MAT-PLOTLIB, PANDAS, SCIKIT-LEARN, SEABORN, TENSORFLOW, KERAS.* Participants will complete several projects and case-studies with practical datasets as part of the school. For an extensive list of lecture modules and hands-on programming projects, please check the school website at the bottom.

All modules will be held on evenings and weekends for the convenience of participants. The extensive projects and <u>PYTHON</u> programming for DATA SCIENCE (DS), MACHINE LEARNING (ML), DEEP LEARNING (DL) is of significant value to participants of all backgrounds.

How does this program benefit YOU?

<u>UG/ PG students:</u> Learn the latest programming techniques in *PYTHON* and various packages such as *NUMPY, LINALG, MATPLOTLIB, PANDAS, SCIKIT-LEARN, SEABORN, TENSORFLOW, KERAS* together with practical DS/ ML/ DL knowledge for projects/ thesis and also to gain an unbeatable edge in **placements!**

PhD Scholars/ Faculty members: Use PYTHON, and various packages such as NUMPY, LINALG, MATPLOTLIB, PANDAS, SCIKIT-LEARN, SEABORN, TENSORFLOW, KERAS for research and also to establish virtual labs or for project guidance in DS/ ML/ DL Technologies with real world datasets!

<u>Industry Professionals:</u> Take your skills to the next level by learning PYTHON, and various packages such as NUMPY, LINALG, MATPLOTLIB, PANDAS, SCIKITLEARN, SEABORN, TENSORFLOW, KERAS, together with principles of Module Design and Analysis using Practical Data Sets for DS/ ML/ DL Technologies!

About the Instructor:



Prof. Aditya K. Jagannatham is a Professor in the Electrical Engineering department at IIT Kanpur, where he holds the Arun Kumar Chair Professorship, and is a well known expert and trainer on 5G, Optimization and Machine Learning. He received his Bachelors degree from the Indian Institute of Technology, Bombay and M.S. and Ph.D. degrees from the University of California, San Diego, U.S.A. From April '07 to May '09 he was employed as a senior wireless systems engineer at Qualcomm Inc., San Diego, California, where he was a part of the Qualcomm CDMA technologies (QCT) division. His research interests are in the area of next-generation wireless

networks, with special emphasis on various 5G technologies such as massive MIMO, mmWave MIMO, FBMC, NOMA, Full Duplex and others. He has published extensively in leading international journals and conferences. He has been recognized with several awards including the CAL(IT)2 fellowship at the University of California San Diego, Upendra Patel Achievement Award at Qualcomm, P.K. Kelkar Young Faculty Research Fellowship, Qualcomm Innovation Fellowship (QInF), Arun Kumar Chair and the IITK Excellence in Teaching Award.

Target Audience

- Ph.D. scholars pursuing research in DS/ ML/ DL technologies
- M.Tech/ B.Tech students undertaking thesis/ projects in DS/ ML/ DL technologies
- Faculty members of Engineering Institutions/ Universities
- Engineers from Wireless Industry and R&D Organizations

For more details and registration information, visit the website http://www.iitk.ac.in/mwn/ML/