

UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II

**DOTTORATO DI RICERCA / PHD PROGRAM IN
INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

Seminar announcement

Monday 13 February 2023, Time: 12:30 - 13:30

**Room “Aula Seminari DIETI”, Building 3, Floor 1, DIETI
Via Claudio, 21 - NAPOLI**



Prof. Vishal Monga

Pennsylvania State University, USA
EECS Faculty

Embracing Data Imperfections Via Domain Enriched Visual Task Learning

Abstract: This talk will survey recent and current research themes in the Information Processing and Algorithms Lab (iPAL) – <http://signal.ee.psu.edu> -- at Penn State, directed by Prof. Vishal Monga. Inspired by approaches in statistical estimation, the talk will discuss the incorporation of prior knowledge in learning

frameworks, particularly deep neural networks. We will demonstrate that informed priors and accompanying architectures can help address vexing challenges in deep learning for image processing and vision such as limited and/or noisy training data.

Lecturer short bio: Prof. Vishal Monga has been on the EECS faculty at Penn State since Fall 2009. From Oct 2005 July 2009 he was an imaging scientist with Xerox Research Labs. He has also been a visiting researcher at Microsoft Research in Redmond, WA and a visiting faculty at the University of Rochester. He received his PhD from the department of Electrical and Computer Engineering at the University of Texas, Austin. Prof. Monga's research has been recognized via the US National Science Foundation CAREER award. He is also a recipient of the 2019 Penn State Engineering Alumni Society (PSEAS) Outstanding Research Award and the 2022 PSEAS Premier Research Award. For his educational efforts, Dr. Monga received the 2016 Joel and Ruth Spira Teaching Excellence award. He currently serves on the IEEE SAM, Computational Imaging and the Bio-Imaging and Signal Processing Technical Committees (TCs). He was a Technical Directions chair of the IEEE Image Video and Multi-dimensional Signal Processing TC from 2017-19. He has served on many Journal editorial boards in signal and image processing and vision including IEEE TIP, JSTSP, TCSVT, SPL etc. He is a founding editorial member of the open access Frontiers in Signal Processing. In 2022, Dr. Monga was inducted into the National Academy of Inventors; he holds 45 US patents. He is the Editor of the Springer book: Handbook of Convex Optimization Methods in Imaging Science.

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