

## REPRODUCIBLE SCIENCE

Scuola Superiore Sant'Anna | Pisa, Istituto TeCIP, Blue Room 9:30 - 11:00 22 november 2019



## Dr. Diego COLOMBO PhD

Senior Software Developer for MICROSOFT DEVDIV

## **Abstract:**

Scientific results are the pillars of the next wave of results. It is imperative to be able to build on solid foundations and able to share finding that others can leverage and observe. The challenge of creating and sharing material is not a simple one, and often results are not easy to reproduce, this is a crucial issue when others wants to leverage current research results to build their theories. Lack of regression testing on experiments, version management, and cooperation methodologies brings risk to the credibility and impact of research work. The DevOps world had to face such issues for a long time in production environments and at a large scale, lots of different tooling flavours but always a single goal in mind: capitalise on previous assets, version management for correct consumption and regression testing for early catching shifting behaviours. Adopting and adapting such methods would improve the research processes; such endeavour is a significant core pillar of the Alan Turing Way promoted by the Alan Turing Institute and applies to a wide plethora of disciplines.

In this session, we will cover scenarios and approaches that could lead to the production of "reproducible science".

At the and of the discussion, Microsoft and Microsoft Research Cambridge initiatives for students and doctoral students / doctorates will be introduced.

## **Short Bio:**

Senior Software Developer for Microsoft Dev Div, has spent most of his life building tools and frameworks for a wide set of industries: robotics, video games, finance and developer tools. Creating next generation tools to enable developers and researcher to achieve their goals is his drive and passion.

He has contributed to the Microsoft Xna framework, Microsoft Robotics Studio, .Net interactive and other initiatives. His Academic background is rooted in Robotics and Realtime graphics, with a PhD on Realtime metaprogramming. He has studied in Pisa and IMT Lucca and worked in very diverse companies, from start-up to corporation. The Net is vast and infinite.