

# RICCARDO NOVELLI

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Via delle sterlizie 11 ◇ Nettuno (RM)

repg2studi@gmail.com

## EDUCATION

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**Liceo Scientifico Innocenzo XII** (High School)  
Sperimentazione Brocca (Math and Computer Science)

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**Politecnico di Milano**

Expected 2020

*Bachelor of Science "Ingegneria Matematica" (Applied Mathematics)*

- Calculus I, II
- Multivariable Calculus
- Linear Algebra
- Numerical Analysis
- Probability
- Statistics
- Physics I, II
- Advanced Multivariable Calculus
- Analysis of PDE
- Stochastic Models
- Financial Mathematics

## EXPERIENCE

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**Onde Analysis**

October 2017 - September 2018

*Football Performance Analyst*

- Watching games and using proprietary data collection platform (Wyscout) to capture key event data.
- Sports Betting simulations (Asian Handicaps, Total Goals Lines, Over/under, BTTS, etc.), focusing on analysis and research.
- Developing an expected goal (xG) model to assess goal scoring probability.
- Mathematical analysis of spread betting strategies using Poisson and Skellam distributions.

## TECHNICAL STRENGTHS

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**Computer Languages**

C, C++, Matlab, R, Python, Latex, Tableau, FEniCS, Sagemath

**Databases**

MySQL, PostgreSQL

## SELECTED COURSES

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**Differential Geometry and Geometric Analysis Seminar**

*Politecnico di Milano*

- Study of geometric properties of curves, surfaces, and their higher dimensional analogues using the methods of calculus with many applications in various physical sciences, e.g., solid mechanics, computer tomography, or general relativity.

## Introduction to Machine Learning

- Foundations of learning and making predictions from data. Study of basic concepts such as trading goodness of fit and model complexity. Learning algorithms, and how to evaluate the performance of machine learning algorithms.

## LANGUAGE SKILLS

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<b>Italian</b>	Native
<b>English</b>	C2 level (TOEFL Certificate)
<b>German</b>	B2 level

## SOFT SKILLS

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- Mathematical modelling
- Experience exploring large datasets.
- Strong analytical and problem-solving skills including a solid foundation of statistics knowledge.
- Knowledge of probability theory, stochastic calculus and numerical algorithms such as finite differences, Monte Carlo simulation, etc.
- Excellent written and verbal communication skills to report research results as well as methodologies.
- Ability to manage multiple tasks and thrive in a fast-paced team environment.
- Excellent analytical skills, with strong attention to detail.

## EXTRA

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- Italian Navy Academy winner of open competitive exam (Line Officers corp)
- Github portfolio