

Data Science Workshop

Lecture 1: Introduction

Marcin Luckner, PhD
mluckner@mini.pw.edu.pl

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**European
Funds**

Knowledge Education Development

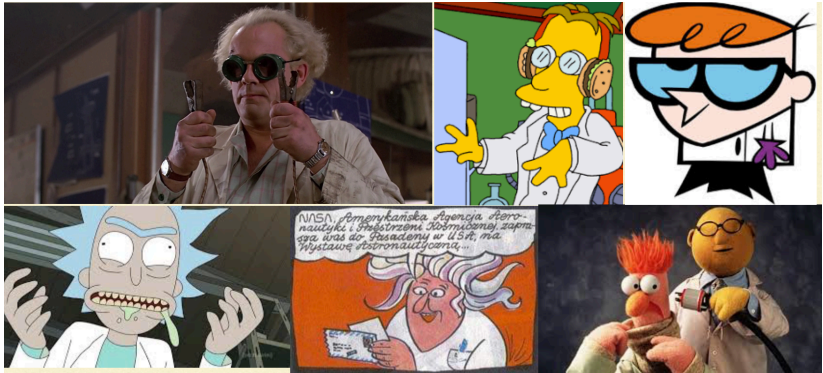
**Warsaw University
of Technology**

European Union
European Social Fund



**MSc program in Data Science has been developed
as a part of task 10 of the project
„NERW PW. Science - Education - Development - Cooperation”
co-funded by European Union from European Social Fund.**

Scientist archetype



Modern Scientist

DR INŻ. MARCIN LUCKNER



- **ABSOLWENT**

Wydział Fizyki Technicznej i Matematyki Stosowanej
kierunek: informatyka w zakresie informatyki stosowanej
(2008)

- **deweloper**

współpraca z polskimi i zagranicznymi firmami nad długoletnimi
projektami aplikacyjnymi (2004-2009), m.in. geoinformatyka
i rozpoznawanie obrazu

- **doktorat**

Instytut Badań Systemowych Polska Akademia Nauk (2010)

- **szkolenie w USA**

Mastering Innovation & Design Thinking, MIT (2018)

- **WYKŁADOWCA I NAUKOWIEC**

Wydział Geodezji i Kartografii (2005-2009),
Wydział Matematyki i Nauk Informacyjnych (2009-obecnie)

- **CZŁONEK ZESPOŁU**

Zespół Rektorski ds. Innowacyjnych Form Kształcenia INFOX

- **DYREKTOR**

Ośrodka Badań Dla Biznesu Politechniki Warszawskiej
(od 2013)



source: <https://www.cziitt.pw.edu.pl/dzial-badan-i-analiz/badania/badania-absolwentow-pw/>

Course objectives

- The lecture aims to prepare students for research team working.
- The group of students will analyse real data from academic, business, and social partners to identify and solve research issues.

Completion

- In contact with our partners, the students familiarise themselves with existing solutions.
- The students will design their solutions to the identified problem during the laboratory.
- The classes end with a report and a public presentation of the results.

Lecture scope

- Team working and work organisation.
- Project management.
- Prototyping and testing.
- Research presentation.

Lectures I

- Team-working and work organisation
 - Work organisation
 - Team-working
 - Communication in a team

Lectures II

- Project management
 - Understanding business
 - Stakeholders
 - Innovative design
 - Research in business
 - Defining and solving business problems

Lectures III

- Prototyping and testing
 - Prototyping
 - UX testing
 - Product testing

Lectures IV

- Research presentation
 - State of the art
 - Research reporting
 - Research presentation

References - Team-working and work organisation

References - Project management

References - Prototyping and testing I

References - Presentation of research

Assessment

- An assessment of the team working and the obtained results.
- The assessment consists of
 1. 50% – an assessment of obtained results,
 2. 20% – an assessment of results quality,
 3. 20% – an assessment of report and presentation,
 4. 10% - tasks from lectures.
- It is obligatory to grant at least half of the points from assessments [1-3].

Assessment of obtained results

- It is necessary to create and test a prototype.
- The assessment is performed in cooperation with a business or social partner.
- Verification methods:
 - A report,
 - A final presentation.

Final mark

- The final mark is a result of the total number of obtained points:
 - 0-50%: 2,
 - 51-60%: 3,
 - 61-70%: 3.5,
 - 71-80%: 4,
 - 81-90%: 4.5,
 - over 90%: 5.
- After a team self-evaluation, an individual final mark can be revised upwards/downwards.



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