

Undergrad Projects and Data. Wait, what Data?

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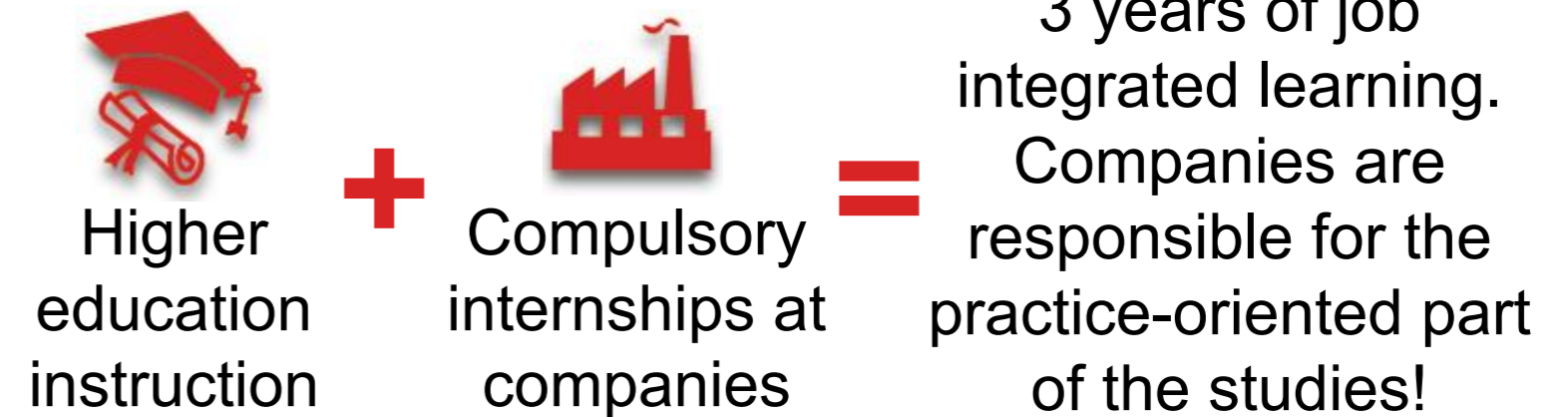


Hochschule für
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Berlin School of Economics and Law

Settings

- **Multidisciplinary** lab using Agile techniques
- **Undergraduate** Computer Science course, 5th semester
- **Student-centered** learning, **project-based** learning
- Coaching and **differentiated** supervision and guidance
- Soft/Hard **skills**
- Solving concrete, **real problems** working in **teams**
- **Real customers**, e.g. Startup Incubator Berlin, local companies

Dual Education System



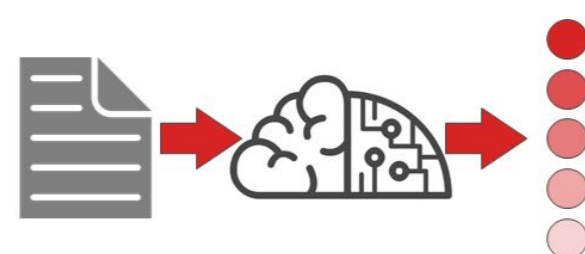
Connecting academic education and real world practices robustly

Companies work on applied, cutting edge research.

Academia provides the theoretical foundations.

Examples of course projects involving (Big) Data

- ★ Classification of text on a left-right bias spectrum
- ★ Text complexity analysis
- ★ Augmented reality for visualizing architectural models
- ★ Intelligent quality control of video, audio, and subtitle files



Data and projects' caveats

- Data sources **unclear** or **unknown** at project start / **Unlabeled** data
- **Noisy** data / **Self-created**, artificial data / **Insufficient** data, almost no data
- In some cases, even **no data at all** to test the models with!
- **Subjective** criteria to classify data
- Data **diversity**: camera input, political texts, movies, images
- Project **complexity** much bigger than both human and tech resources available / **Underestimated** required computing power
- Interest in **Artificial Intelligence** in general and **Machine Learning** in particular rising with time ...
- ... but ... "We want to do AI [but have no idea about it or how]."
- Different **life-cycles** university vs. industry / Students **24/7** co-workers?

Solution:
Adapt teaching

- High students' **commitment** (always!)
- **Satisfied** participants/stakeholders (mostly!)
- **Successful** projects (mostly!)