Czech Technical University in Prague
Faculty of Electrical Engineering
Department of Computer Science

DIPLOMA THESIS AGREEMENT

Student: Ondřej Hubáček
Study programme: Open Informatics
Specialisation: Artificial Intelligence

Title of Diploma Thesis: Exploiting betting market inefficiencies with machine learning

Guidelines:
Based on the availability of data and advances in machine learning, we see a rising scientific interest in the area of predictive sport analytics. The subject of this thesis is to perform a rigorous investigation as well as a practical implementation in this direction.
1) Research the state of the art in data-driven prediction-focused sport analytics
2) Conduct a structured survey and sharpen your focus on most appropriate subfield (e.g., sport) from the perspective of applying machine learning techniques
3) Collect and integrate historical data from relevant sources
4) Design diverse prediction scenarios and respective machine learning pipelines
5) Propose appropriate testing strategy for your models and assess theoretical profits of the whole architecture against various prediction targets given by the market
6) Compare your approach with existing state of the art methods across different dimensions

Bibliography/Sources:

Diploma Thesis Supervisor: Ing. Gustav Šourek

Valid until the end of the winter semester of academic year 2017/2018

prof. Dr. Michal Pechouček, MSc.  
Head of Department

prof. Ing. Pavel Ripka, CSc.  
Dean

Prague, September 9, 2016