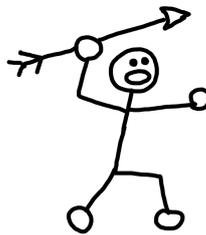




Housing Price Predictor

Housing prices are somewhat magical. Nobody knows exactly why an object costs as much as it does. There are obviously many factors that affect pricing decisions. There is also a subjective element due to the fact that in the end it is a person who fixes the price, which likely does not happen purely based on facts.

Nowadays, apartment-hunting usually takes place on online platforms such as Homegate. Therefore, large datasets are readily available for crawling, neatly labeled with prices and full of interesting features (size, age, management company, etc.). Additionally, we have a large dataset from the Bundesamt für Statistik, telling us much about demographical and geographical features of different areas in Switzerland.



We want to better understand how housing prices are calculated and also predict the prices of existing objects. This could then also help people make more objective pricing decisions. This thesis will involve the use of some well-established Machine Learning techniques. Prior knowledge is an advantage, but not required. If this sounds interesting to you, please do not hesitate to contact us so that we can have a chat. We naturally have some ideas on how to approach this thesis, but we would like to hear your thoughts as well!

You will: Learn how to crawl websites and store large amounts of data. Improve your data analysis and visualization skills. Learn about state-of-the-art Machine Learning techniques. Implement different Machine Learning algorithms and evaluate them against each other. Learn how to analyze and improve the performance of Machine Learning algorithm implementations. Meet with your supervisors once a week to discuss progress. And so on.

Interested? Please contact us for more details!

Contacts

- Yuyi Wang: yuyi.wang@tik.ee.ethz.ch, ETZ G94
- Gino Brunner: gino.brunner@tik.ee.ethz.ch, ETZ G63