

# September 2017

## Complexity Community Sharing Session

7 Sept (Thu) 11.00am – 1.00pm

Seminar Room 102

Blk 1 Innovation Centre, Level 1 (opposite The Hive), NTU  
16 Nanyang Drive, Singapore 637722

### Predicting Urban Neighborhood Quality through Indicator Groups



**Aike Steentoft**

The increasing housing demand in cities typically leads to escalating rents in the most attractive neighborhoods. To be able to predict which neighborhoods will face such changes, we need to closely monitor their attractiveness over time. To that end, we apply the concept of bioindicators, borrowed from ecology, to the city context.

The objective is to use an 'indicator group' of people to assess the quality of a complex environment and how it changes over time. Specifically, we study a Twitter dataset for five US cities, consisting in total of 1.6 million users with 92 million geolocated Tweets, and find that neighborhoods with a high number of high-income profile visitors experience drastic rent increase in the following years. Our findings have implications for urban planning and highlight the potential of only using a specific subset of the population to predict neighborhood quality.

**Aike Steentoft** is a first year PhD student in the School of Computer Science and Engineerin at NTU. He works in parallel as a researcher in the 'Big-Data Informed Urban Design and Governance' project at the Singapore-ETH Centre.

### Vectorised Analysis of Offers Data at the Greatest e-Commerce Marketplace in Poland

In the presentation, I will show the e-commerce marketplace challenges, a few examples of R&D machine learning projects at the greatest e-commerce marketplace in Poland - allegro.pl. In particular topics regarding: image based analysis - visual recommendations, image business quality assessment and some tips about using of vectorised offer titles at allegro platform.



**Dr. Anna Wróblewska**

**Anna Wróblewska** received her PhD in computer science in 2008 at the Faculty of Electronics and Information Technology at Warsaw University of Technology. She works as an assistant professor at Warsaw University of Technology. She has several years of experience in the design of intelligent systems and description of semantic data acquired in a commercial and scientific environment. She also works as a senior data scientist at Allegro - the biggest e-commerce marketplace portal in Eastern Europe, where she deals with the intelligent methods of data analysis - text as well as images. She is the author of over 35 publications in Polish and international journals and materials. Her research interests are focused on machine learning in practical applications, including primarily semantic understanding of the data: text and image, semantic search, text mining, learning and building ontology, recommender systems.

Register [here!](#)

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