

JIN, WEIHAO



COUNTRY OF ORIGIN / BIRTH COUNTRY

China

EDUCATIONAL BACKGROUND

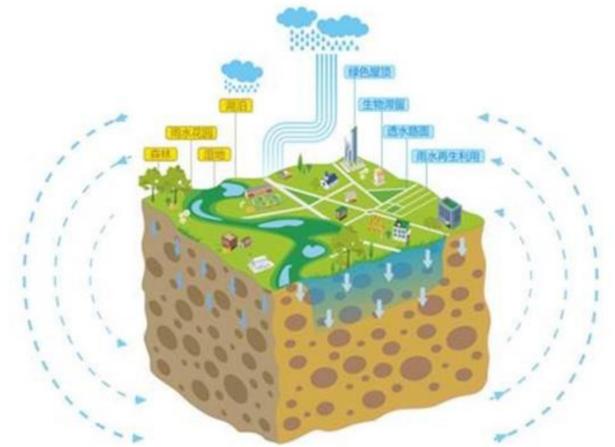
09/2017 – M.Sc. Hydroinformatics, IHE Delft, Netherlands

09/2013 – 06/2017 B.Sc. Water Supply and Drainage Engineering, Southeast University, China

WHY I CHOOSE HYDROINFORMATICS:

My interest in Urban Flood Management started at a young age. Suffering from the big flood in 1998 is the worst memory in my childhood life. After I graduated from the high school, when I could choose the profession I am interested in, I did not hesitate to choose the Water Sewerage Engineering.

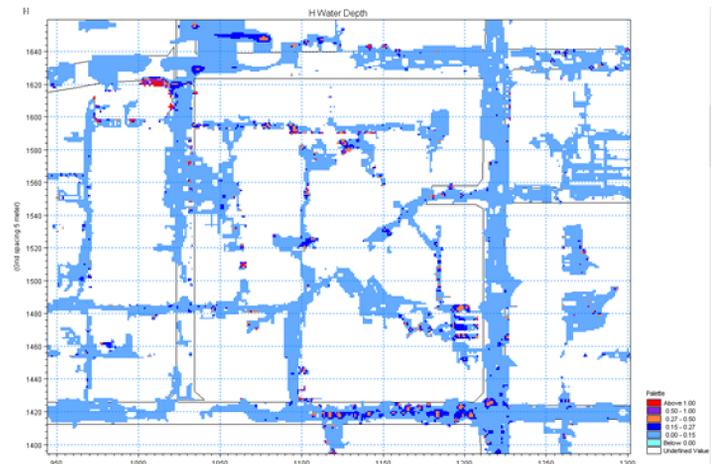
I went to the Netherlands being an visiting student at UNESCO-IHE from Feb. to May 2017 and worked with Prof. Chris on “Modelling of long term behavior of permeable pavements using SWMM model”. Hydrological modelling is really attractive to me and I believe using simulation modelling is really useful when we would like to build the Sponge City Program in China



海绵城市是指城市能够像海绵一样，在适应环境变化和应对自然灾害等方面具有良好的“弹性”，下雨时吸水、蓄水、渗水、净水，需要时将蓄存的水“释放”并加以利用。

HOW I WILL USE THE KNOWLEDGE GAINED IN THE PROGRAM:

During the upgrading of urban drainage infrastructure, a priority should be made to retain valuable water resources, utilize the natural system to achieve drainage, and achieve natural retention, infiltration and purification. By inhibiting flooding while retaining water, sponge cities turn precipitation back into the blessing it is meant to be rather than the burden it has become. These technical measures are limited by China's national and natural climatic conditions, such as higher population density, lower level of fiscal revenue, four seasons of monsoon climates bringing short-term heavy rainfall, poorer effect and higher cost.



PREVIOUS RESEARCH AND RESEARCH INTERESTS:

China is a country with severe water problems, both in terms of water scarcity, flooding and water quality. Due to the rapid process of industrialization and urbanization and high frequencies of global extreme weather, the urban water problems have become very prominent in the last decade. The damages caused by floods are exponentially increasing. Amongst these problems flooding ranks on the top of the most destructive natural hazards in China. These damages are concentrated in cities and are to a large extent a result of heavy summer rainfalls. Their frequencies and intensities have significantly increased in the past decades.

A key contributing factor is rapid urbanization with poor urban planning and design, alongside unsustainable development, which transforms natural landscapes into imperious concrete surfaces with buildings and pavements, effectively reducing the capacity of landscapes to absorb rainwater, so increasing urban runoff, leading to floods.

As a response to those increasing flood impacts the Chinese Central Government called in 2013 for widespread uptake of the Sponge City approach across China. The Sponge City approach aims to enhance infiltration, evapotranspiration and capturing and reuse of storm water in the urban environment. Retrofitting the existing urban drainage system offers a more realistic, cost-effective and sustainable solution.