

VERY LARGE **BUSINESS APPLICATIONS** Carl von Ossietzky Universität Oldenburg



# **VLBA - Business Informatics and Sustainability**

The research activities in the VLBA department under lead of Prof. Dr.-Ing. Jorge Marx Gómez are focussing on ICT-based sustainability. Especially the fields of environmental management information systems and sustainability reporting are not only represented in research but in the range of courses as well. Moreover, the VLBA department carries out several joint projects with a large number companies, research



NEMo is an abbreviation for the German project title "Sustainable satisfaction of mobility demands in rural areas". Due to the demographic change, it becomes more and more difficult for municipalities to provide a basic set of public transport services. Simultaneously, mobility demands in rural areas are increasing in consequence of the agglomeration of health care and shopping infrastructures to nearby cities. To facing these problems the research project NEMo is working on the development of sustainable and innovative mobility solutions and business models with focus on rural areas. Information and communication technology plays an important role as enabler for the participation of citizens. NEMo is funded by the Volkswagen foundation with 1.53 mil.€ over a duration of four years. The inter- and transdisciplinary project is headed by Prof. Dr.-Ing. Jorge Marx Gómez. Overall 8 professors are participating in the project: Frank Köster, Jürgen Taeger, Jürgen Sauer, Andreas Winter from Oldenburg, Anna Henkel from Passau, Jantje Halberstadt from Vechta and David Woisetschläger from Braunschweig. In addition, many partners from industry and administration are involved. In a close dialogue with the citizens of the pilot

## institutions and municipalities. WISdoM

Water Innovation Solution Management



With continuously evolving digital transformation, new challenges occur in work life. To encounter these challenges, it is essential to develop company-wide information systems to dealing with information overload as well as establishing departments for innovation management and digital processes, business models, expertise. New agile management and new work methods will be implemented. Moreover, the transfer of digital expertise must be maintained and extended utilizing proper structures and goal-oriented actions. The project WISdoM (Water Innovation Solution Management) which is part of the research cooperation with the Oldenburgisch-Ostfriesischer Wasserverband (OOWV) is dealing with the above mentioned subjects to find solutions for the water industry. The research cooperation is focussing and information management, innovation data on

#### management and digital competencies.

#### regions, the solutions will be tested and evaluated.

#### **WISdoM** - https://oowv.vlba.de/



Facing environmental problems more and more cities want to promote cycling. An attractive bicycle infrastructure is a key requirement to ride the bike more often. Therefore there is high demand for appropriate cycling data to improve existing infrastructures. Unfortunately there is no or only a small amount of cycling data available. Existing approaches are mainly based on Smartphone collected information and the user behavior of a very limited number of young cyclists. To facing these problem ECOSense is focussing on the

development and implementation of a sensor set to collect bicycle data. The sensor which is attached on the bicycle itself collects data on position, acceleration, vibration and from the environment of the cyclist. The sensor data will be processed and analyzed by the VLBA department. ECOSense is funded by the German Ministry of Transport and Digital Infrastructure in the mFUND programme with 97.272€ and has a duration of one year. In the study the VLBA is collaborating with the participating companies meindienstrad.de (baron mobility service, lead partner) and CoSynth from Oldenburg.



## Prof. Dr.-Ing. Jorge Marx Gómez

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- M. Sc. Alexander Sandau
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- M. Sc. Cedrik Theesen
- M. Sc. Marius Wybrands

## Fields of research

- Environmental Management Information Systems
- Business Intelligence
- Sustainability Reporting

### **Regular courses**

**ECOSense** - https://ecosense.mein-dienstrad.de/

Business Intelligence I + II, BUIS I+II, ERP-Technology, Mobile Commerce, IT-Controlling, Customizing, E-Business, Business informatics II, and project groups

**NEMo** - https://www.nemo-mobilitaet.de/

http://vlba.wi-ol.de/

http://www.uni-oldenburg.de/centos/

