

Energy Data Analytics for Business Intelligence

Midori is a startup founded in Turin and hosted at the Innovative Companies Incubator of the Polytechnic University of Turin (I3P – www.i3p.it). The team is made of young researchers, engineers, and a psychologist: all of them motivated and passionate. Midori builds smart metering and energy analysis tools, addressed to businesses and citizens. Our products are a mix of technological and social innovation, the outcome of the union between high competences in the ICT world and signal processing, with a strong inclination to the analysis of the social needs in the world of energy. Midori collaborates with high-profile national and international companies and we intend to grow always more, until we become a landmark in Italy in the field of Smart Building.

Midori developed **Ned**, a smart meter that provides users, by mean of a Dashboard and a Mobile App, the consumptions of home electrical appliances, **using only one single battery** supplied sensor, easy to install at the electrical control panel by mean of a common current clamp.



The aim of Ned is giving users data consumption of **home appliances**, increasing their awareness on energy usage and providing them accurate tips to reduce energy wastes, tailored on daily behaviors, by mean of a gamified platform with monthly challenges, incentives and rewards. Ned wants to stimulate a cultural change and to increase the people understanding of energy use at home by fostering their **awareness** by targeting them with accurate tips to reduce energy and CO2 emissions. The Internet of Data can play a key role in deepening the consumers' knowledge over their behavior and it is a well-known fact that aware consumers generate a long-term benefit for the environment. **Data collected by Ned can tell us a lot about people behavior and quality of appliances at home.**



Thesis proposal

The aim of the thesis project is designing and building a **Big Data Analysis Tool for Business Intelligence and Data Insight**. The Tool will be integrated in a Dashboard for bug tracking and general data reporting already developed by team Midori.

The candidate will design Data Analytics and Data Mining algorithms to

1. enable user added value and tailored services (e.g.: profiled advertising of sustainable products/services, risks assessment by Insurance companies);
2. improve data analytics on results of Ned analysis for better insights driving further product development and bug fixing.

Skills required

The candidate is required to have the following skills and competences

- Good knowledge of .NET/C# and Webservices
- Good knowledge of Framework AngularJS
- Good knowledge JavaScript
- Basic knowledge of HTML/CSS
- Good attitude to teamwork
- Good level of spoken English

Useful information

Workplace: Energy Center, Via Borsellino 38, Torino

Worktime: 9-18, Mon-Fri

We guarantee high flexibility in worktime and place, milestones oriented activities and nice and young work environment.

References

Midori website: www.midorisrl.eu

Ned website: ned.midorisrl.eu

Linkedin: <https://www.linkedin.com/company/9251404/>