Smart use of (big) data will help towards faster and more (cost) effective humanitarian aid. Contributing to open data, data analysis and capacity building in governments and NGO’s are essential to increase the understanding of humanitarian data.
Data trends

• Huge increase in availability of data
• Push for open data from donors (IATI)
• Digital infrastructure is good and improving.
Humanitarian Data Scientist

Math & Statistics
- Machine learning
- Statistical modeling
- Supervised learning & Unsupervised learning
- Statistical computing (e.g. R)
- Relational algebra

Data management
- Data modelling
- Data collection
- Data refinement and cleaning
- Database, SQL and NOSQL
- Parallel databases and parallel processing
- Open Data standards
- API’s
- Hadoop and Hive/Pig

Programming
- Computer science fundamentals
- Scripting language (i.e. Python, javascript)
- Filtering scripts (i.e. D3.js)
- Web development
- Experience with xaaS like AWS

Communication & visualisation
- Story telling skills
- Translate data-driven insights into decisions and actions
- Interactive dashboards
- Infographics
- Visual art design
- Knowledge of visualisation tools like Tableau, Adobe toolkit

Information management
- GIS & Mapping
- Survey methodology
- Data analysis
- Finding & judging datasets

Humanitarian business
- Cluster coordination
- Assessments
- Logistics
- Roster management
- Disaster Risk Reduction
- Response preparedness
- Disaster relief
- Recovery
- Operational planning

Network
- Clients
- Humanitarian agencies
- Development agencies
- Access to skilled people, information managers, database managers, data analysts
- Businesses
- Investors, sponsors and donors

Business skills
- Leadership
- Strategic business planning
- Marketing & Sales
- Customer relations
- People management & Human resources
- Administration
- Public speaking
- Problem resolution
- Finance and accounting skills
- Delegating tasks
- Motivating team

Soft skills
- Curious about data
- Influence without authority
- Hacker mindset
- Problem solver
- Strategic, proactive, creative, innovative and collaborative

Network
Goals

1. Contribute to key open data for humanitarian aid

2. Increase the understanding of data for humanitarian aid

3. Build the capacity of humanitarian organizations in the use of data
Contribute to key open data for humanitarian aid
Mapped in 2 hours by 7 people
176166 health sites added
Architects judge the damage of houses (online)

☐ This house has to be rebuilt
☐ This house can be repaired
☐ This house has no (visible) damage

Crowdsourced shelter data
Increase the understanding of data for humanitarian aid
Where the maps are missing
Estimate flood damage to houses
Use data to set priorities before departing to the field
Build the capacity of humanitarian organizations in the use of data
Provide trainings on information management
Get products and services in core business
Get products and services in core business