

### Human Factors, Risk and Safety research group Alma Mater Studiorum – University of Bologna (Italy)

### Dr. Davide Giusino, M.Sc.

Department of Psychology davide.giusino2@unibo.it



### Prof. Luca Pietrantoni, Full Professor

Department of Psychology luca.pietrantoni@unibo.it





## Areas of Expertise

- Human Factors and Ergonomics
- Traffic and Transport Behaviour
- Risk and Safety in Transportation

#### **Research activities**

- Users' risky and safe behaviours analysis and promotion
- Technology, automation and digitisation acceptance
- Socio-cultural differences in travel choices and behaviour
- Human-machine interaction and communication
- User-centered design
- Human performance
- Human capital



#### SHIFT2RAIL'S 2019 INFORMATION DAY: Open Call for Proposals

- <u>S2R-OC-IP1-01-2019 Advanced car body shells for railways and light material and</u> <u>innovative doors and train modularity</u>:
  - *Doors*: assessing **passenger comfort** to support a **user-centered design** of innovative door solutions allowing easy and friendly access to all categories
  - Interiors: analysing differential impacts of human factors, cognition and culture to design the most efficient cabin commands
  - developing a European survey to define new human-machine interactions and a new common human-machine interface
- <u>S2R-OC-IP4-01-2019 Complementary Travel Expert Services</u>:
  - investigating factors influencing consumers' travel decision-making and behaviour based on behavioural studies and passenger surveys about aspects comfort, satisfaction and specific needs



- <u>S2R-OC-IPX-02-2019 Breaking language barriers</u>:
  - examining (un)safe and (un)effective driver communication across routine, degraded and emergency situations to support the design and development of the aimed technological solutions
  - evaluating the technological communication solution's impact on safety based on human factors methods
- <u>S2R-CFM-IP5-01-2019 Smart data-based assets and efficient rail freight</u> <u>operation</u>:
  - CBM: applying human factors investigation methods to support a usercentric design of condition based maintenance dashboards
  - *Real-time Network Management*: analysing interactions between yard and infrastructure manager to promote solutions for improving human interaction and communication
  - Intelligent Video Gate Terminals: applying human factors methods to support a user-centric design of IVG



# Bologna main Italian railway junction



- Strategic geographical location
- Italy's fifth-largest station
- 159 000 passengers/day
- 700 trains/day

- Research and Innovation as priorities of UNIBO mission
- EU Project Management with technical, legal, financial, and administrative expertise

